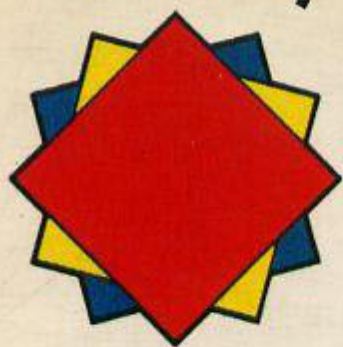


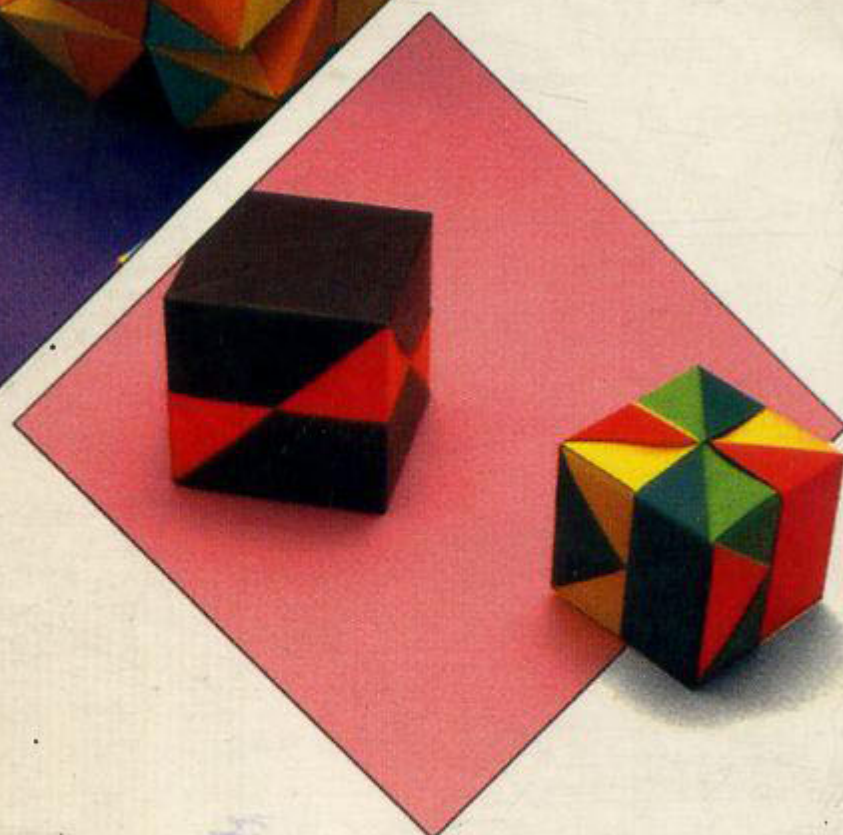
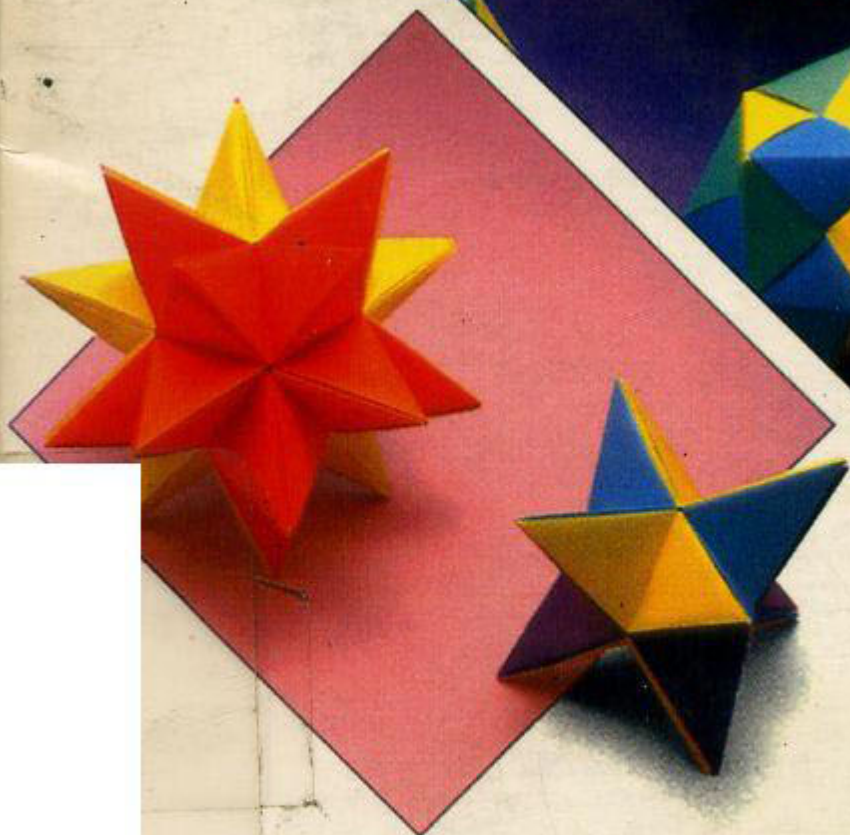
折紙世界！



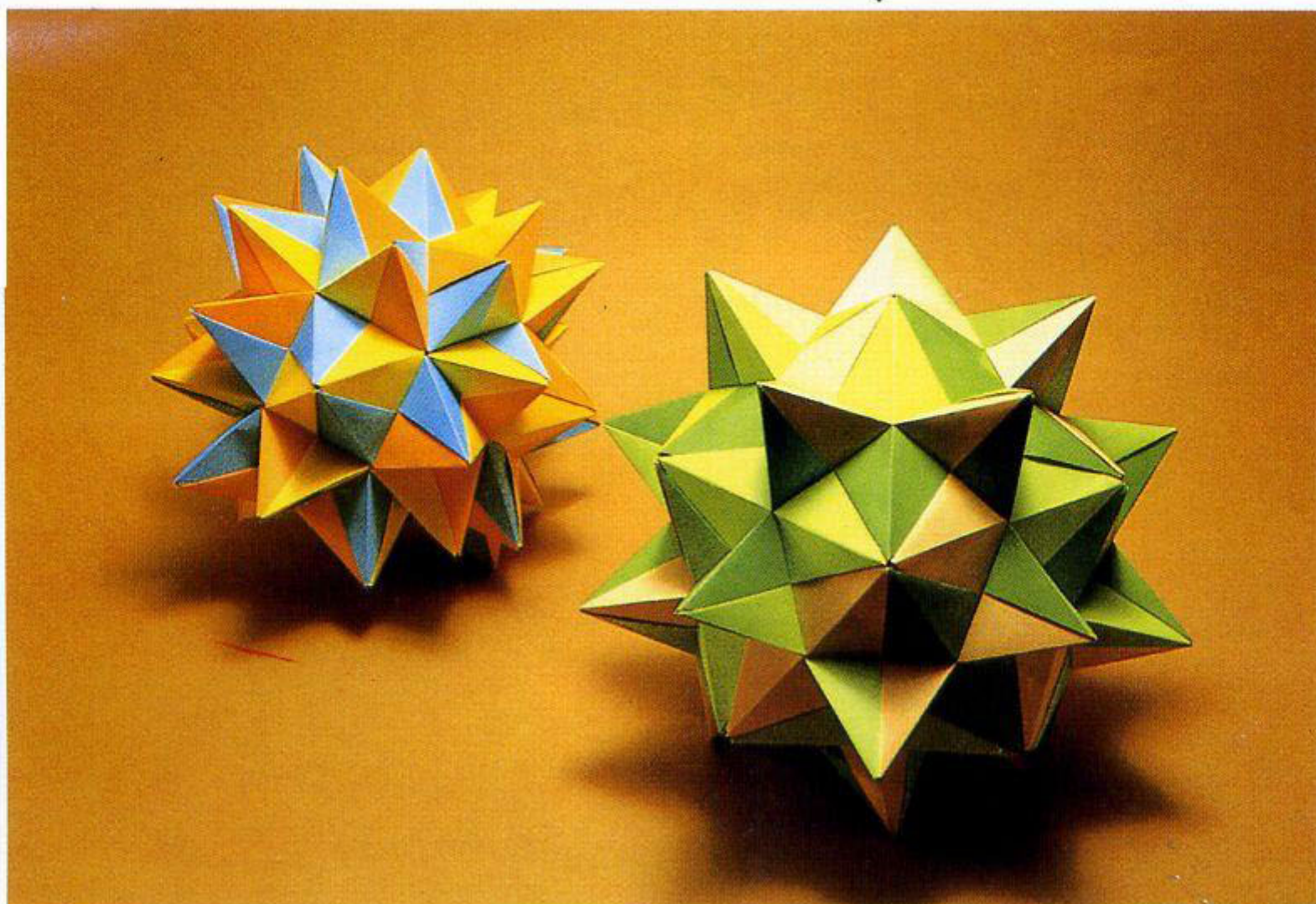
日本全國折紙協會指定教材

立體造型折紙

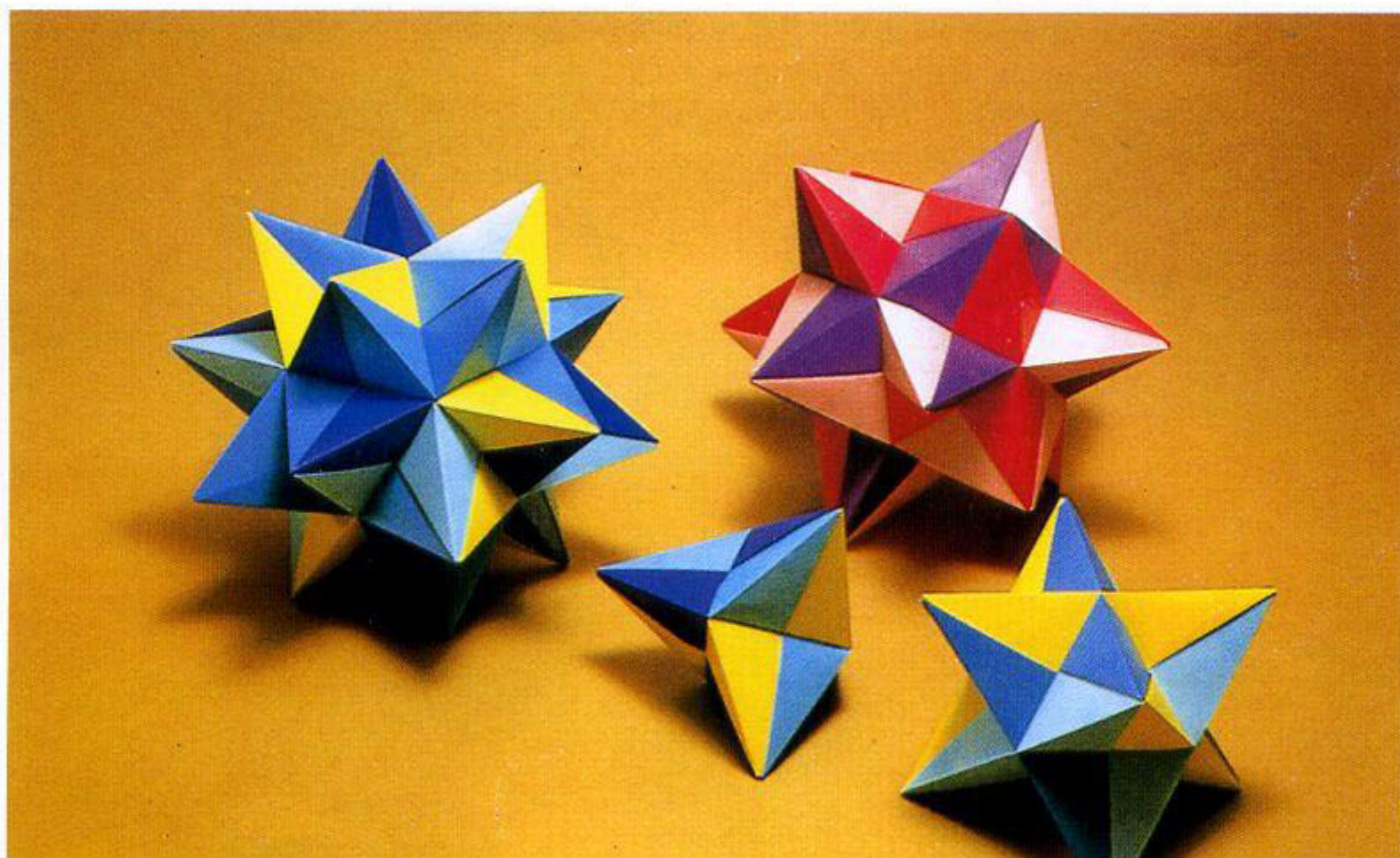
組合式折紙



非凡出版社

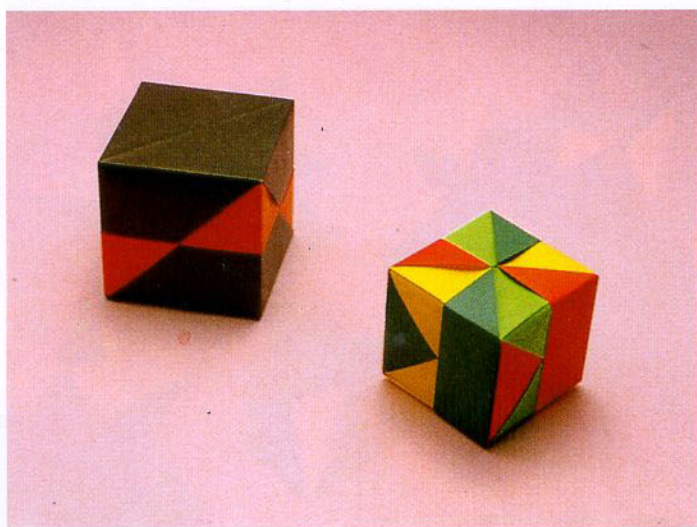


正三角形的組合（60張組合）

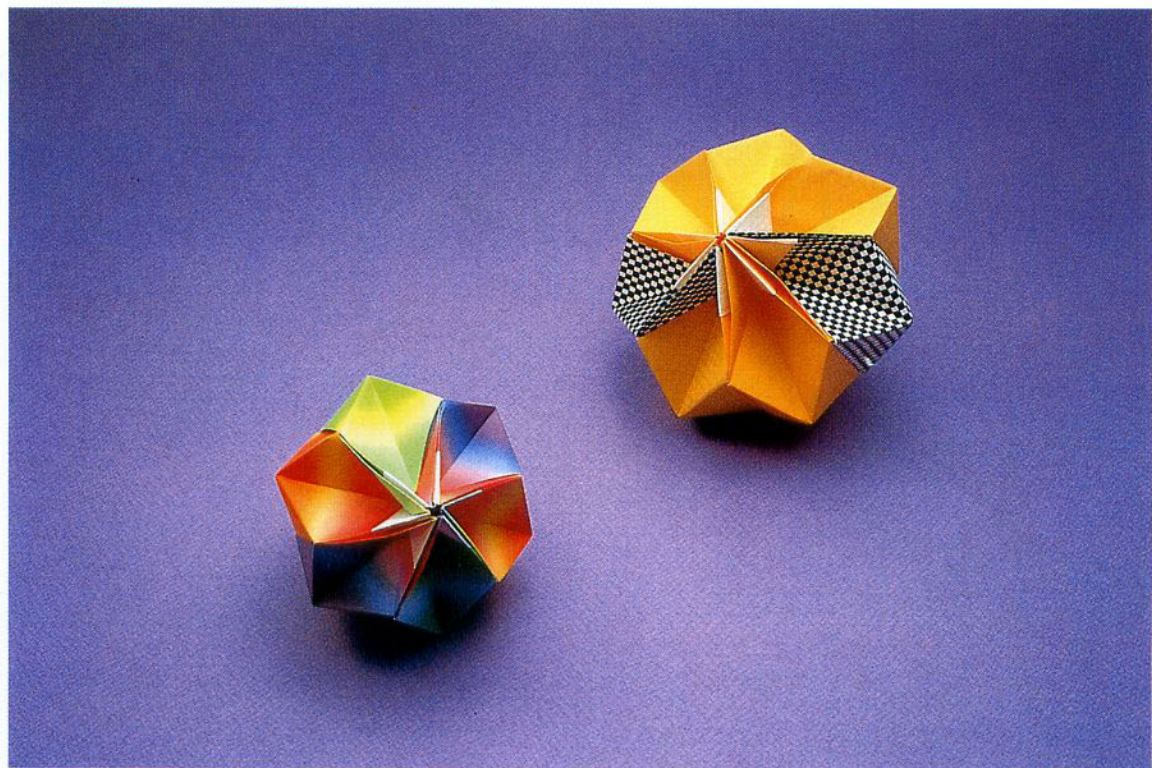




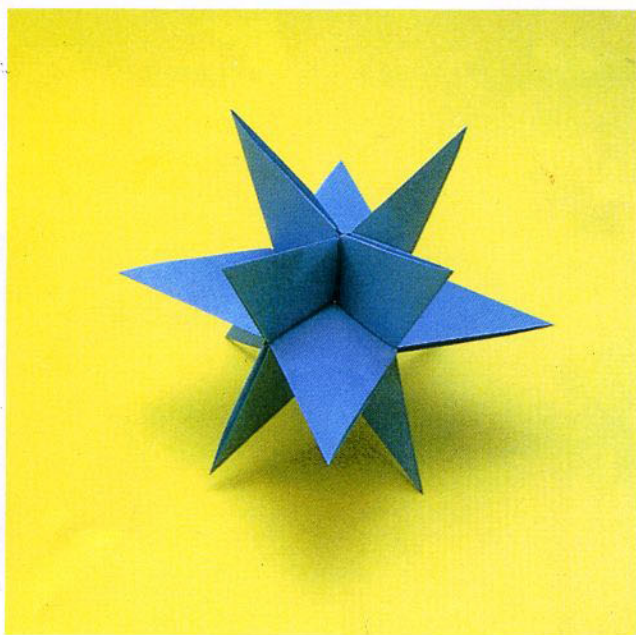
簡易菌部式組合（左起 48 張組合、90 張組合、12 張組合、32 張組合、6 張組合）



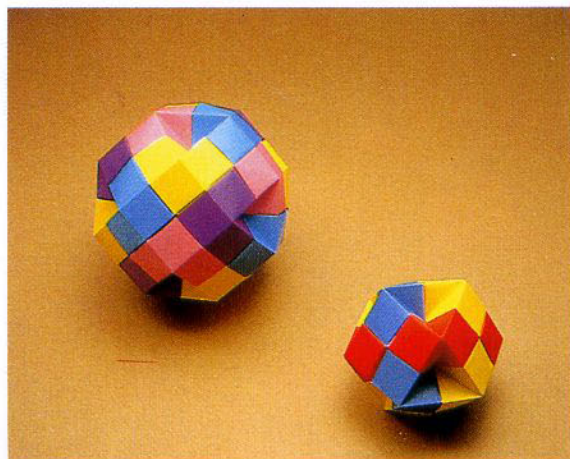
禮物盒



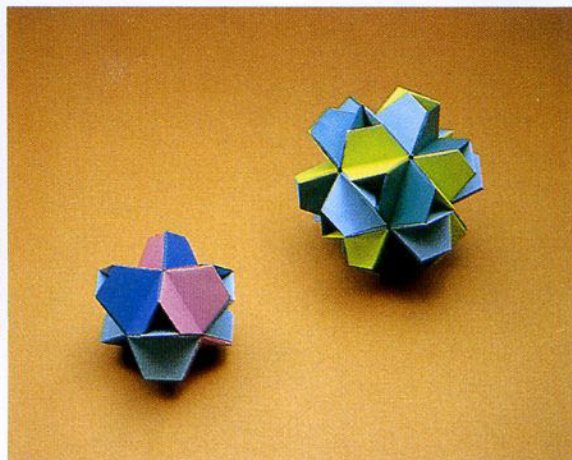
南瓜



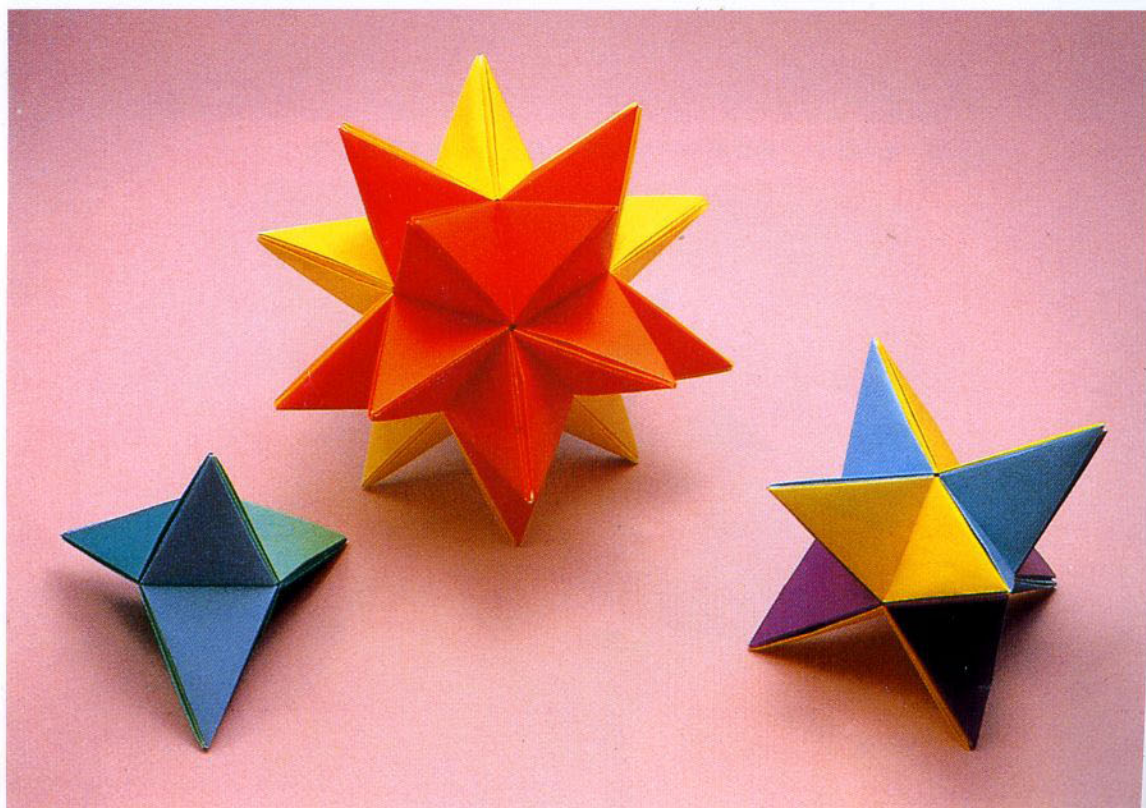
星光



坐墊式組合



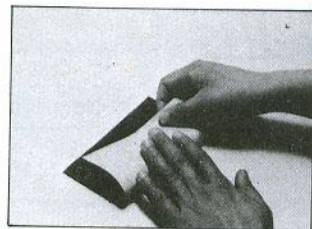
龜殼（左起 12 張組合、30 張組合）



菱形組合（左起 6 張、30 張、12 張組合）

立體造型折紙

組合式折紙



寫在前面

所謂組合式折紙，是指折出許多個同樣的紙型，不用漿糊，而將之組合成各種不同形狀的造型折紙。

在組合各個分散單位的過程中，除了可享受到謎般的樂趣，而且當您完成一個造型時，還能體驗到折紙的喜悅與神奇。

在本書中，主要是以介紹組合式折紙的基本型立方體為開端，而衍生出像香包等各種不同的立體造型。您也來做做看吧！

目錄

風車立方體.....	4
坐墊式組合.....	6
禮物盒之一.....	8
禮物盒之二.....	10
禮物盒之三.....	12
吹陀螺之一.....	14
吹陀螺之二.....	16
南瓜.....	18
星光.....	20
紙牌組合.....	22
簡易菌部式組合.....	24
各式香包.....	26
捏摺.....	30
花粉.....	34
菱形組合.....	37
菱形組合・橄欖球式組合.....	40
龜殼.....	42
正三角形組合・正 4、8、20 面體.....	46
正三角形組合・星式組合.....	49
長崎風箏.....	54
香包 12 面體.....	58

※按照號碼順序折，按照箭頭依序組合。

各種記號的說明



折了以後再打開



翻過來



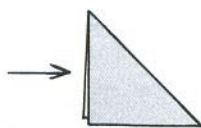
放大圖



壓扁



拉出

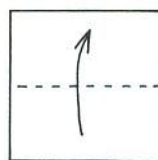


照記號處折合

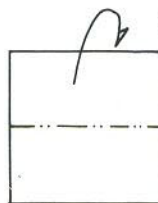


折成二段

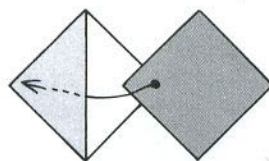
向內折成谷



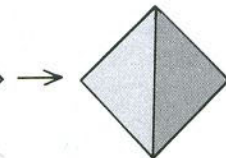
向外折成山



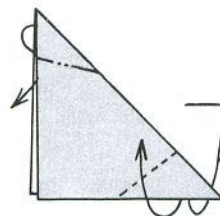
折向背面



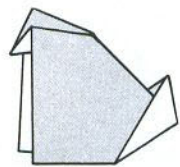
插進洞裡



折進中間



折向外面

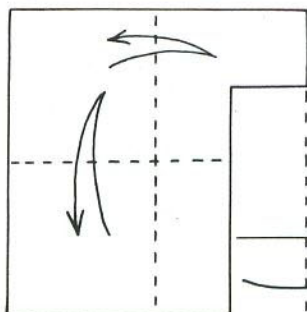


風車立方體

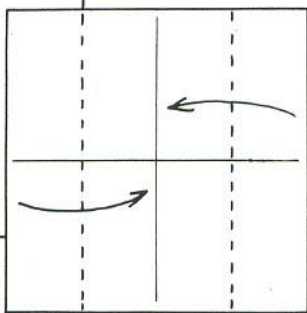
這是承襲傳統折紙法的一種立方體

。「風車」也可做成「連體船」或「帆船」。

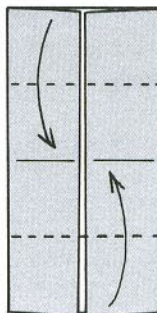
①



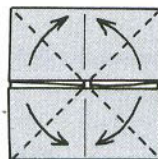
②



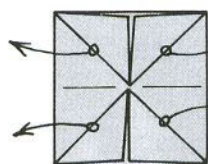
③



④

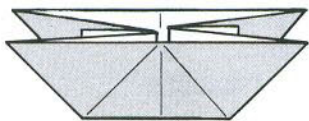


⑤

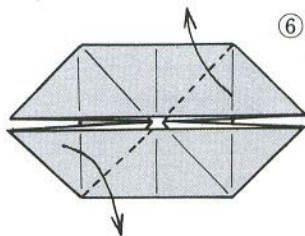


捏住拉開

★ 連體船

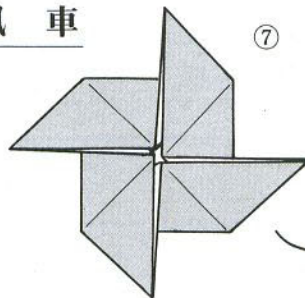


⑥

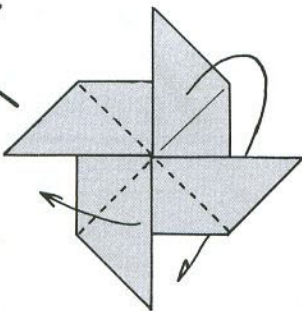
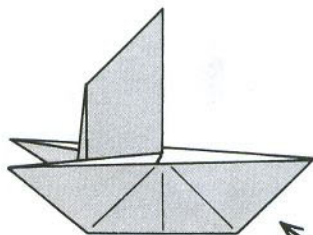


★ 風車

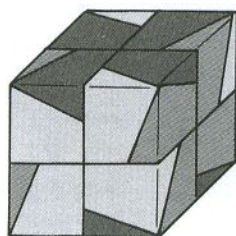
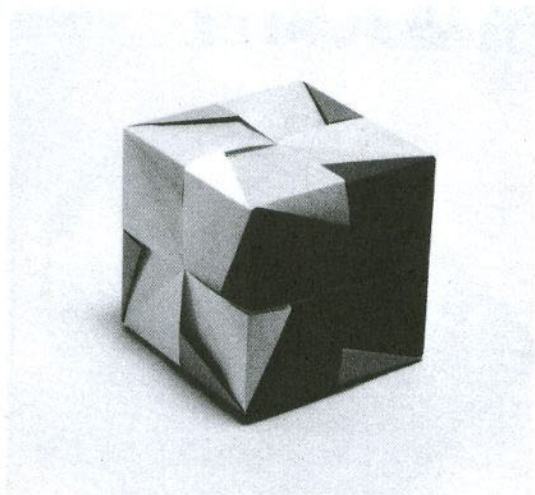
⑦



★ 帆船

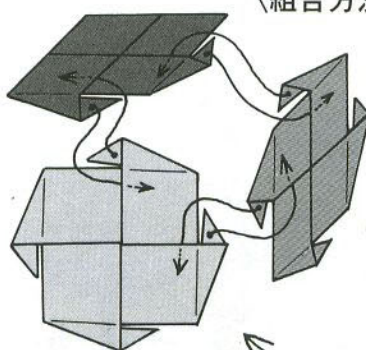


姑且不管這個立方體做得好不好，能利用傳統作品組合成新作品，是這個作品的趣味所在。



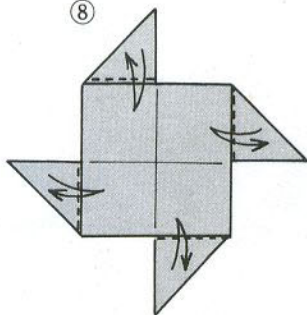
〈組合方法〉

其他三張也照這樣組合

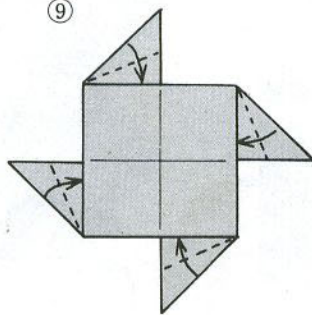


剛開始組合時，像是要解體似的，但組合完成後卻異常的牢固。

⑧

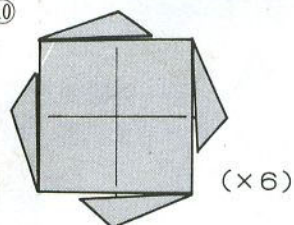


⑨



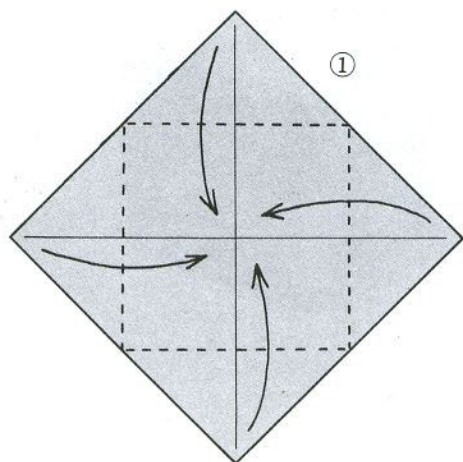
基本型完成

⑩

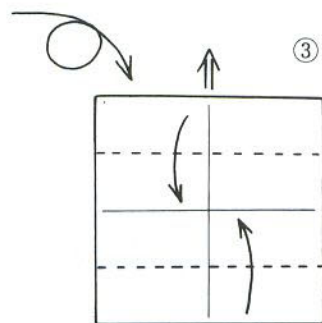
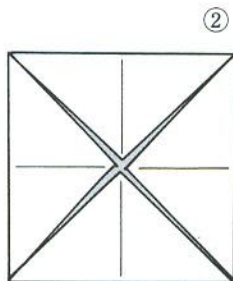


坐墊式組合

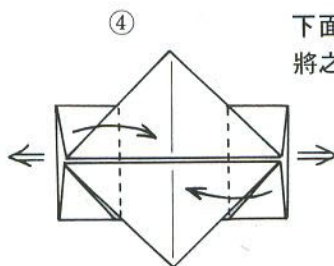
這是以折法相當簡單的坐墊折法為基本型，但是組合成的立體則非常漂亮。



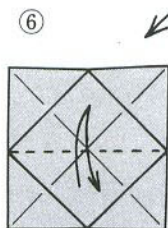
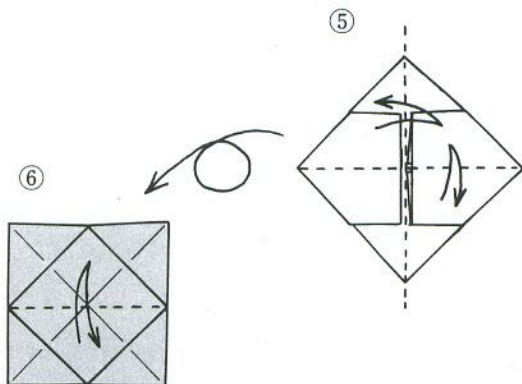
開始時有顏色的向內折



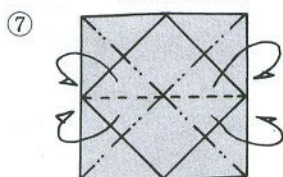
下面不要折，
將之拉出



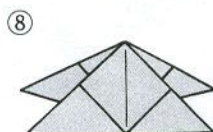
用力折出折痕



照折痕折好

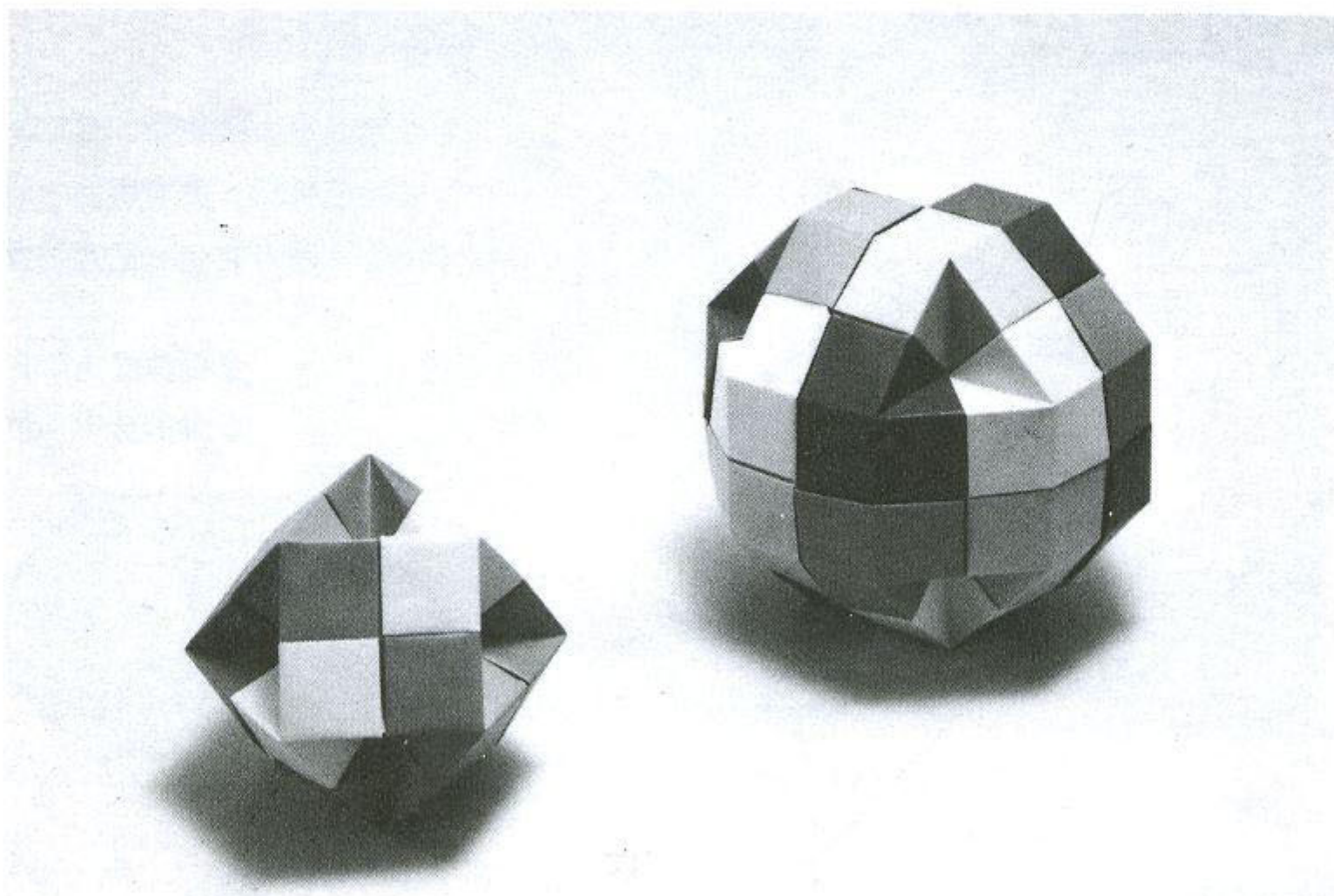


基本型完成



用力折出折痕後打開

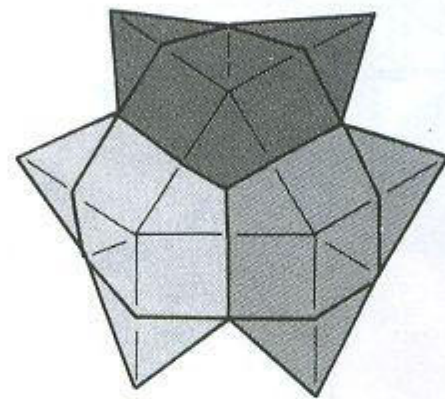
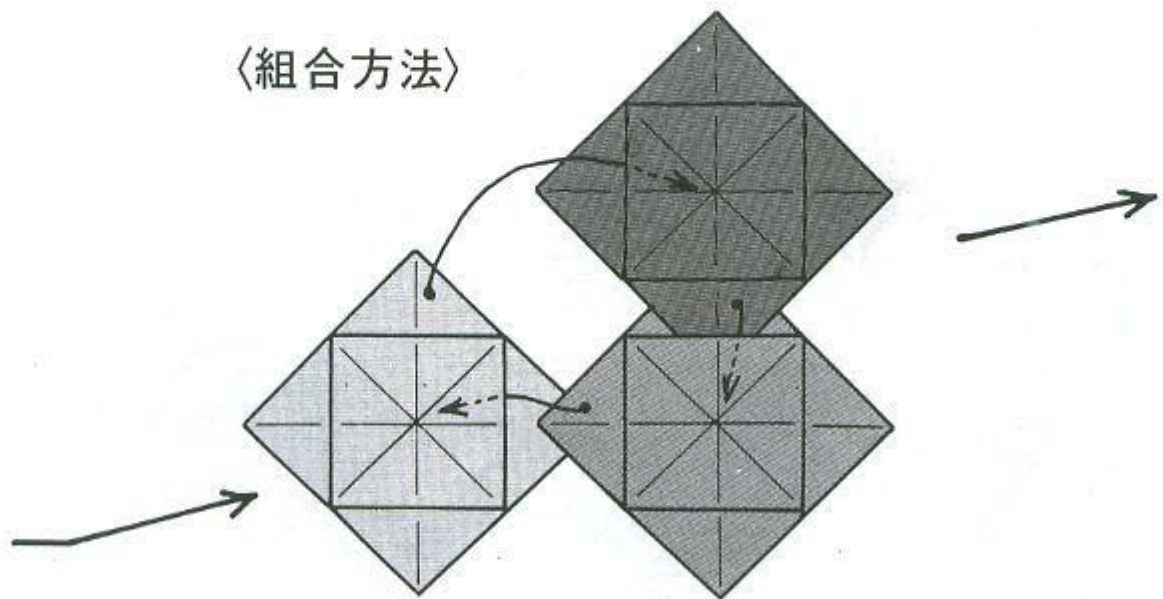




左：12 張組合 右：24 張組合

參考三張組合的方式，想想該怎麼組合。

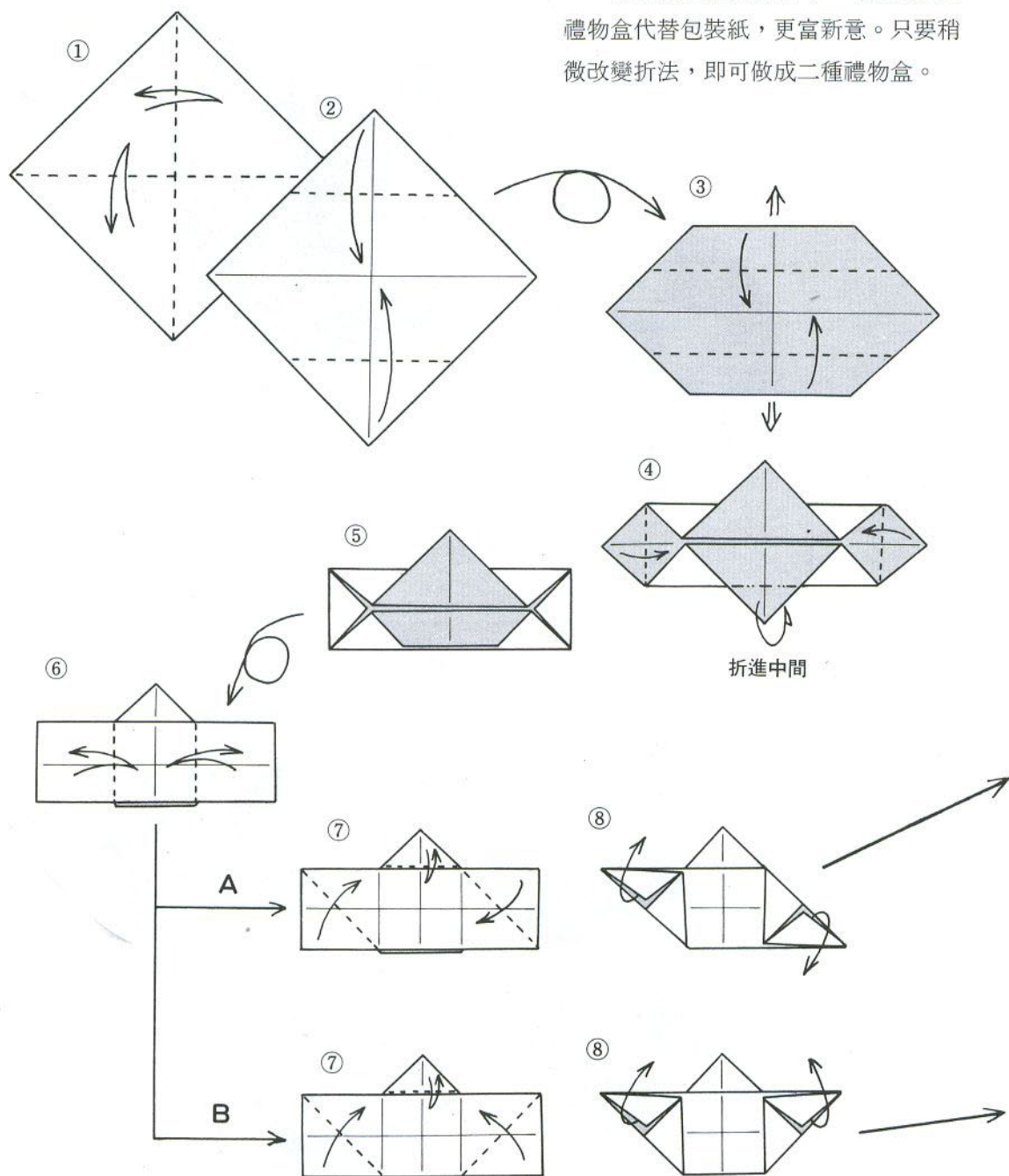
〈組合方法〉



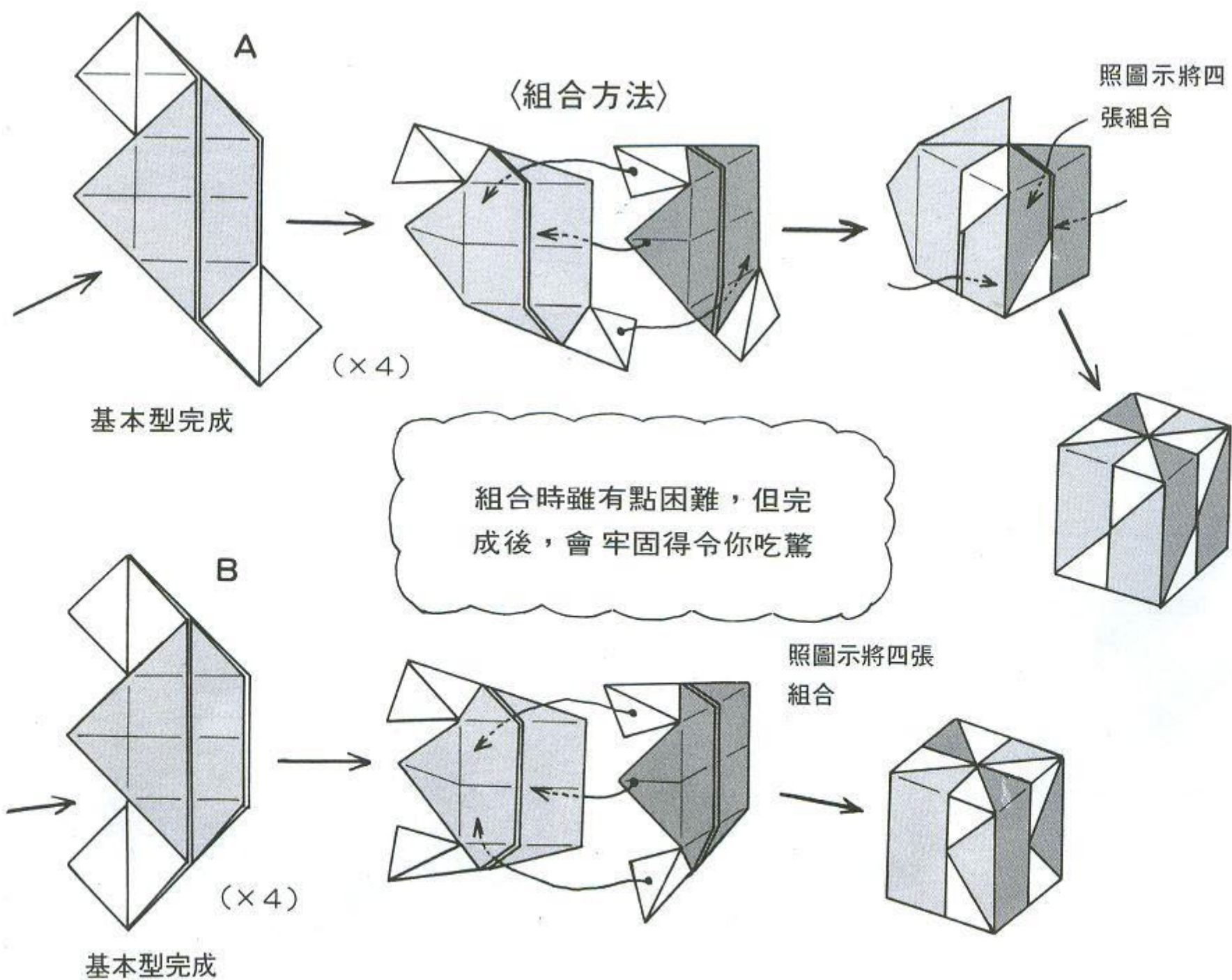
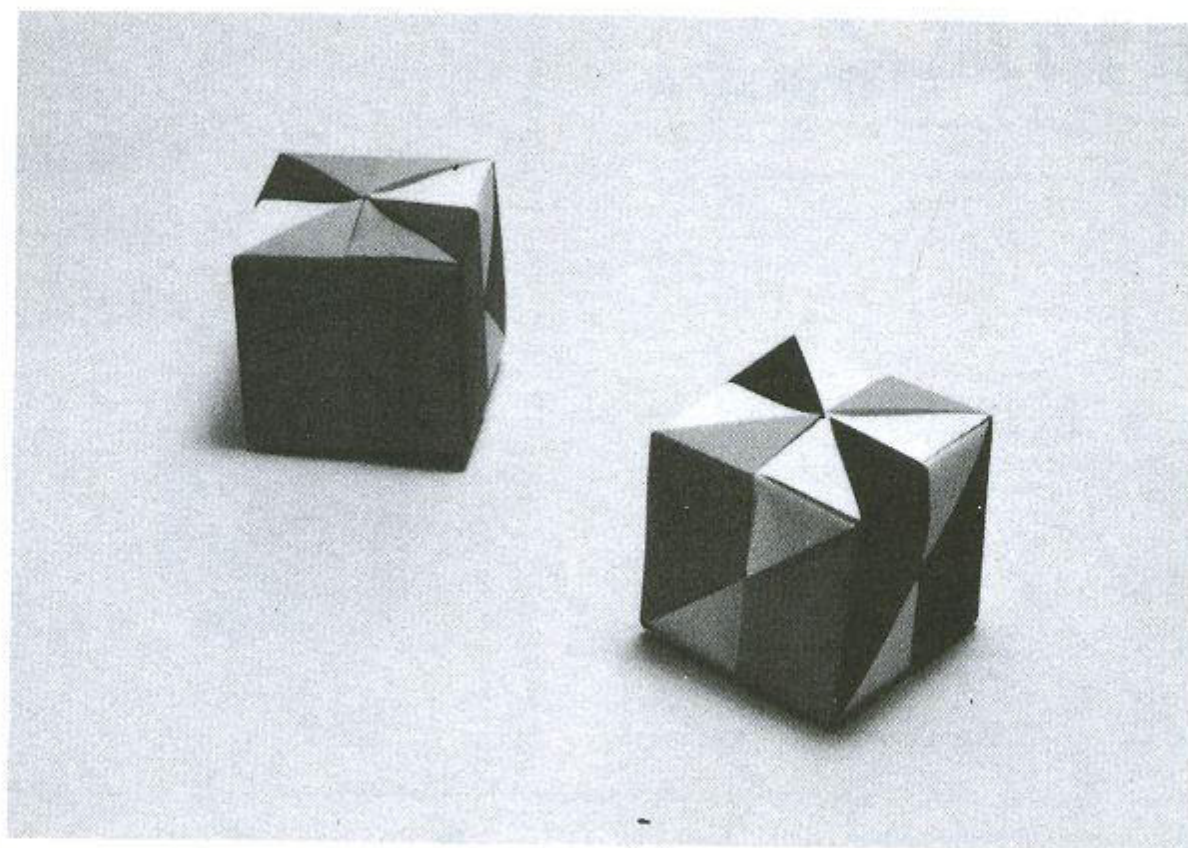
用三張組合，做出一個三角形。

禮物盒之一

當您想送份小禮物時，可以用這種禮物盒代替包裝紙，更富新意。只要稍微改變折法，即可做成二種禮物盒。



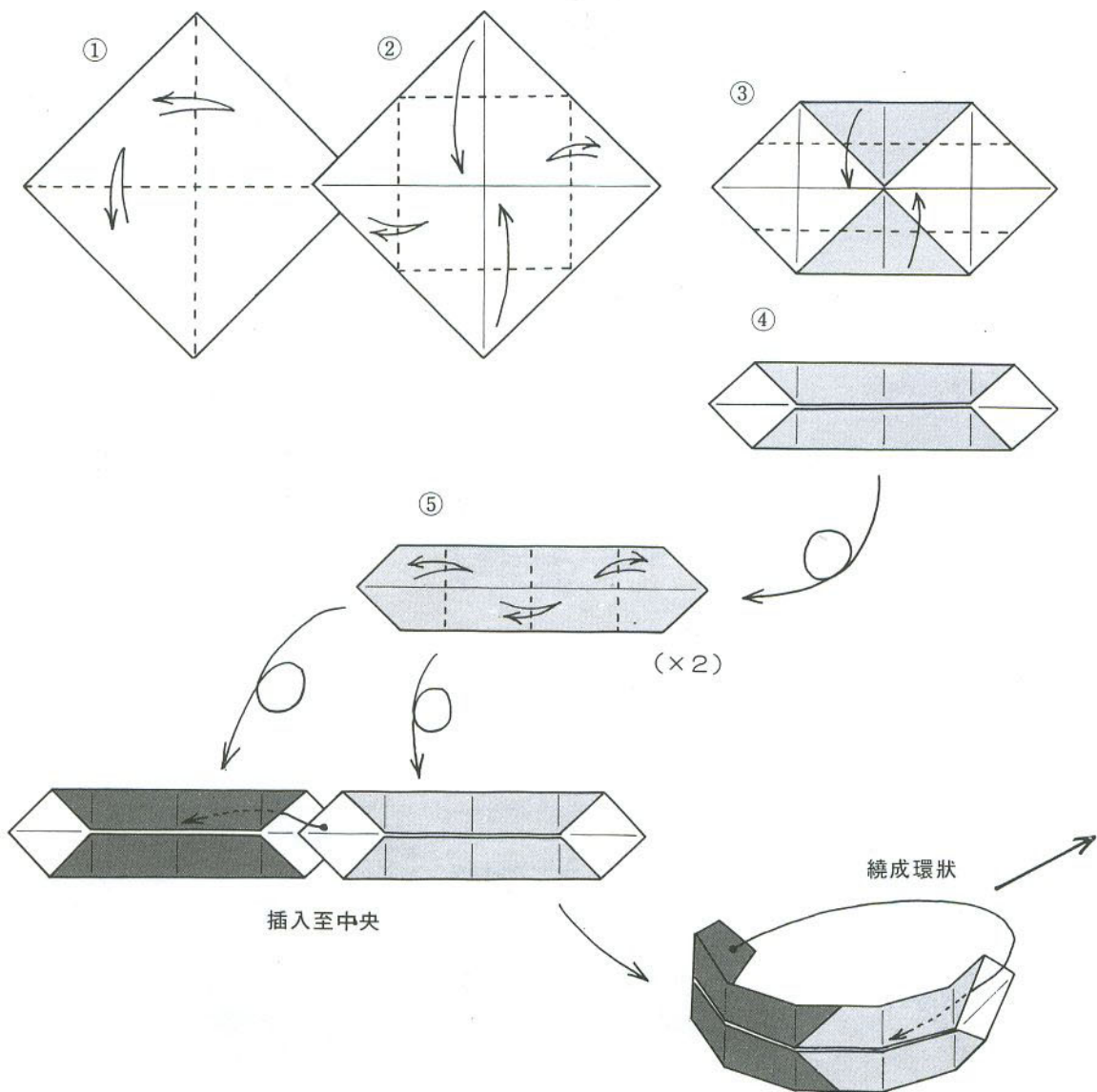
右：A 型禮物盒
左：B 型禮物盒

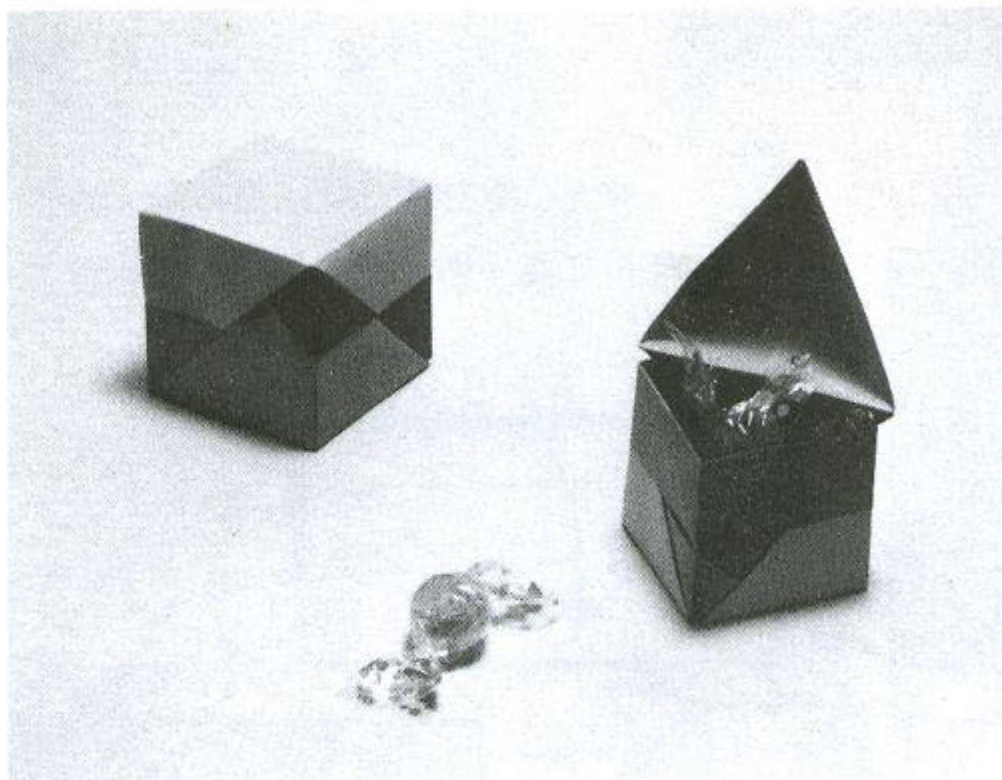


禮物盒之二

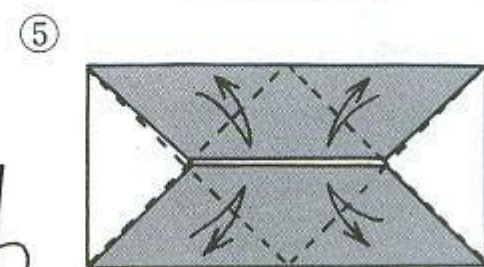
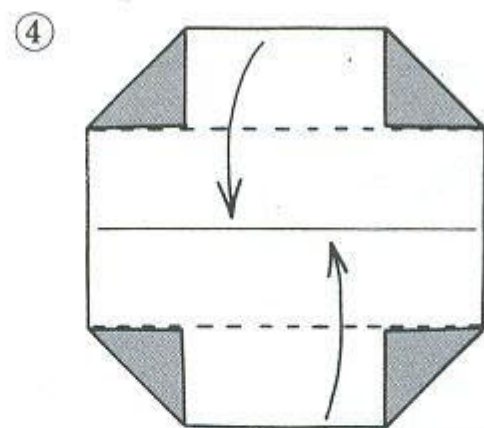
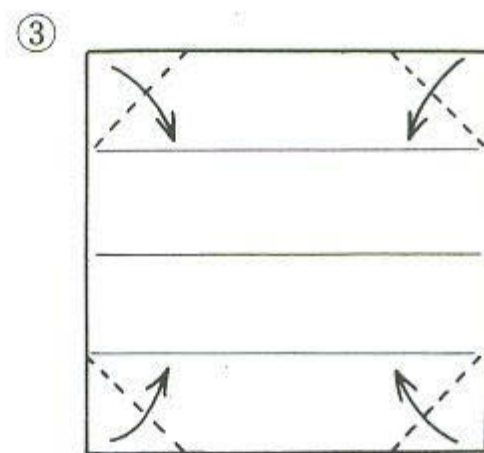
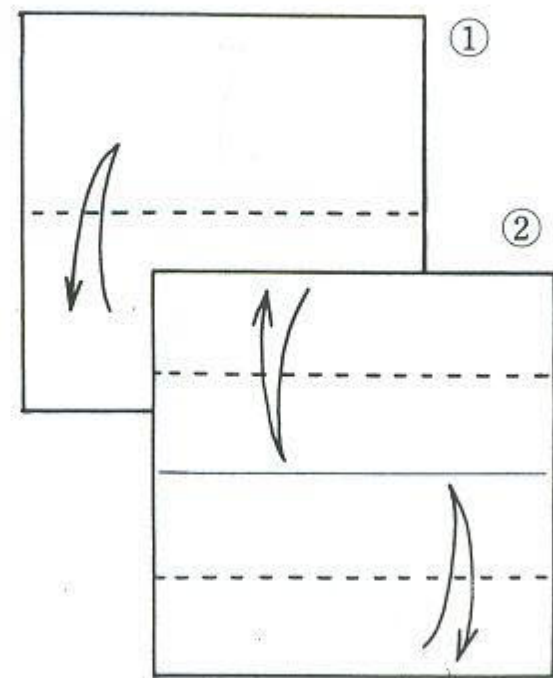
這個禮物盒的特色，是比前者更易使用。以環狀紙型做四邊，鳥嘴般的紙型做盒蓋及盒底，以便將這二種紙型組合起來。

★ 環狀紙型

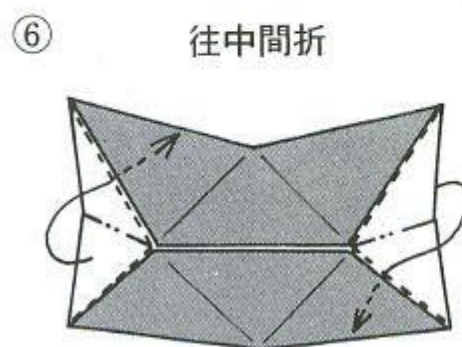




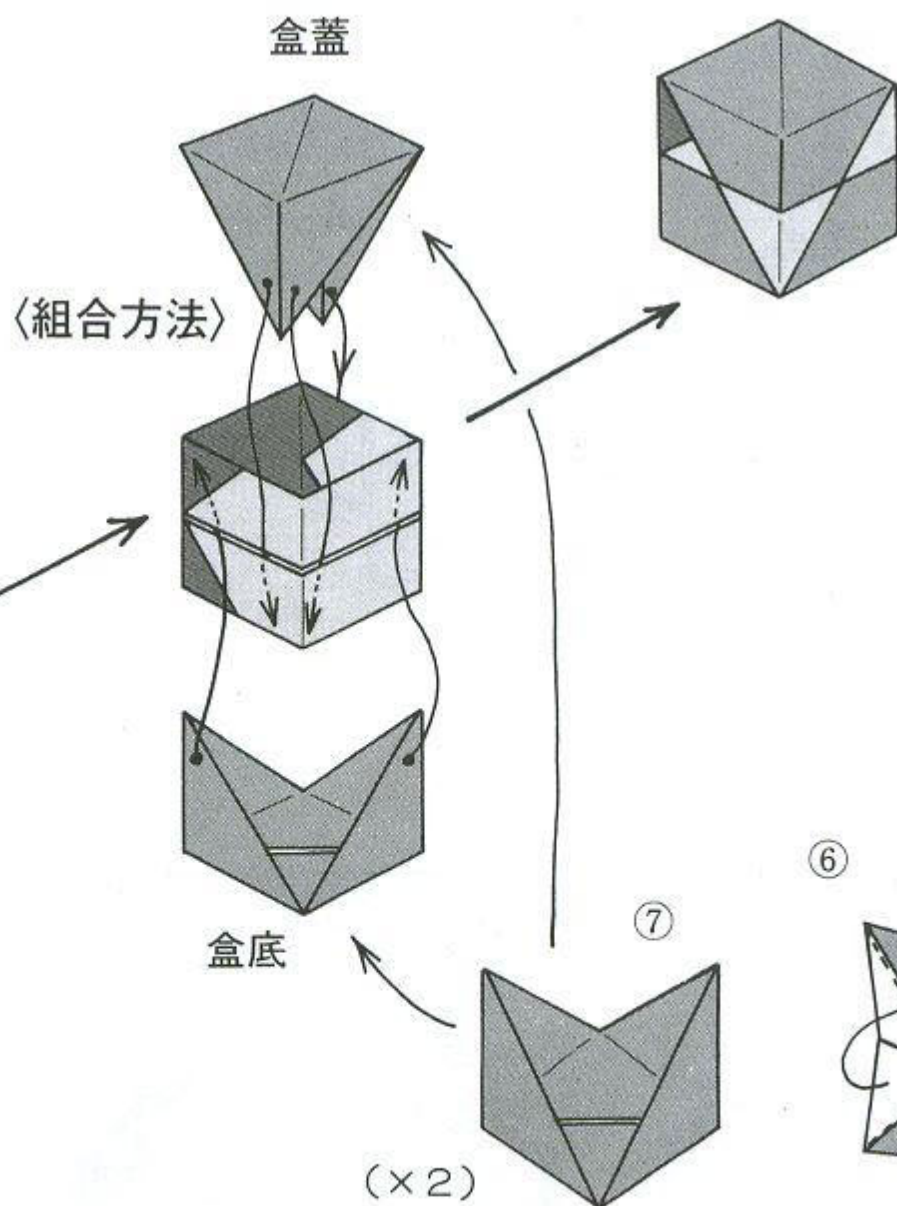
★ 鳥嘴紙型



用力折出折痕

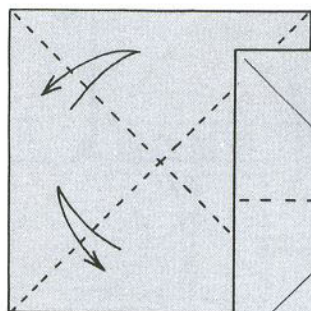


往中間折

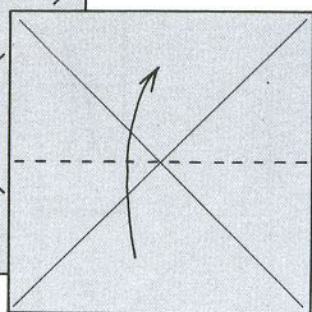


禮物盒之三

①

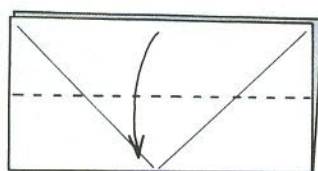


②

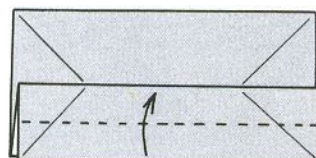


前面二種禮物盒是正立方體，這個則是長方體。您想裝入什麼當禮物呢？

③

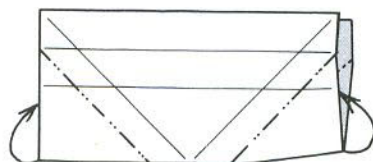


④

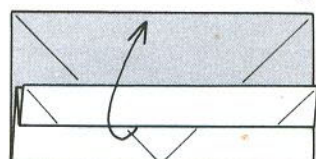


⑦

折進中間

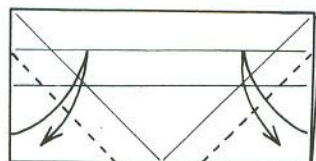


⑤

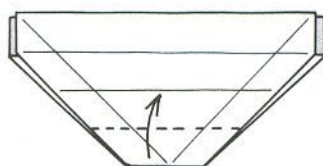


還原至步驟③

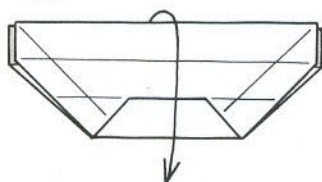
⑥



⑧



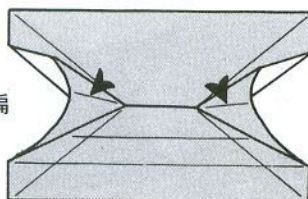
⑨



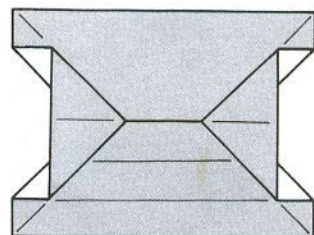
打開

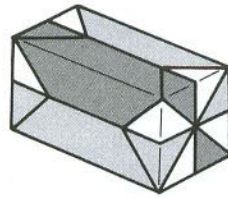
⑩

壓扁

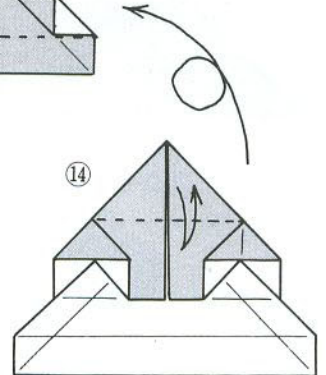
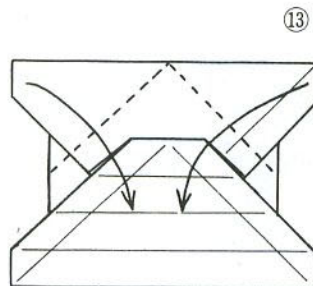
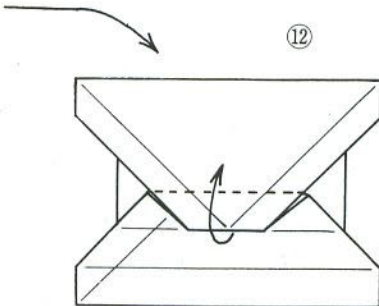
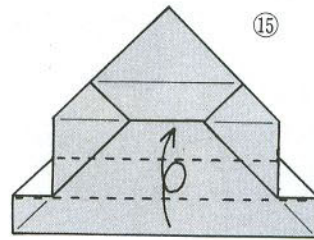
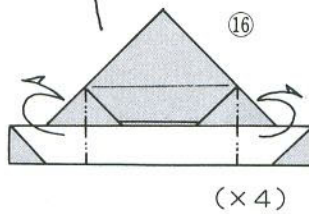
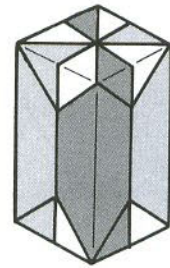
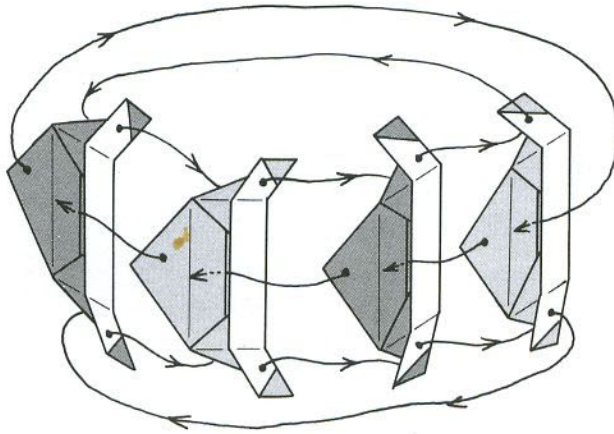


⑪





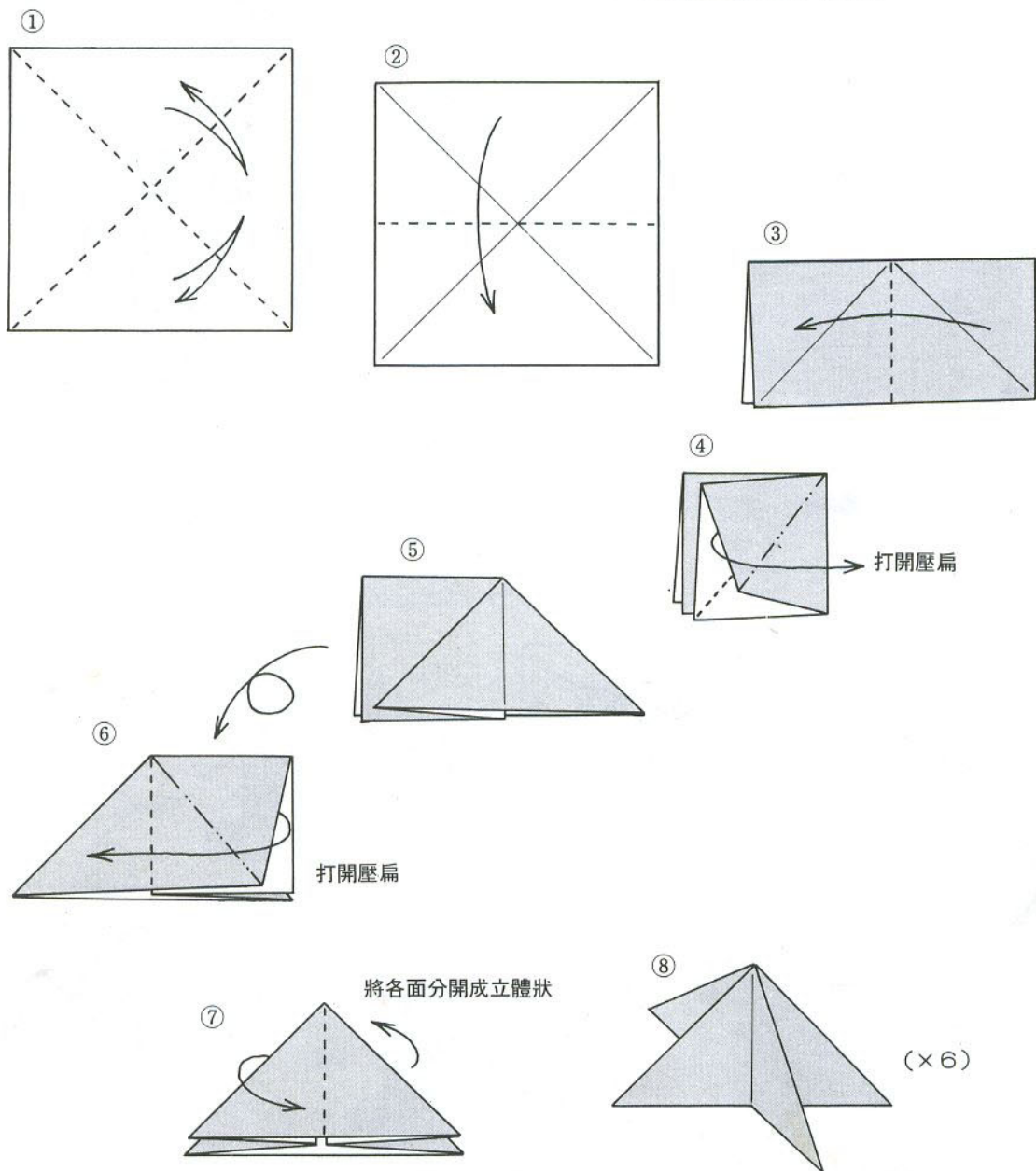
〈組合方法〉

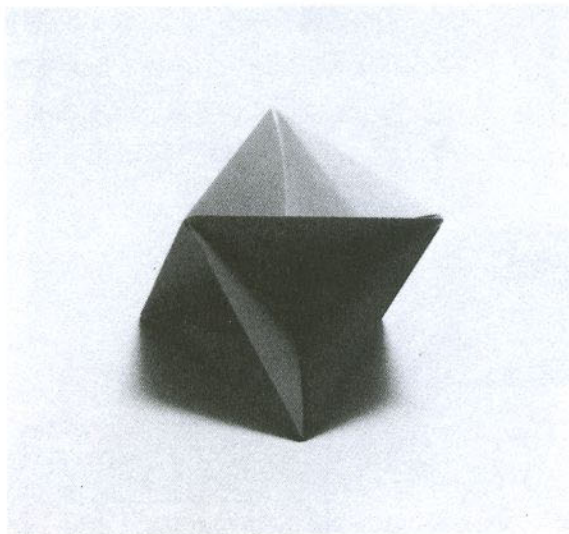


吹陀螺之一

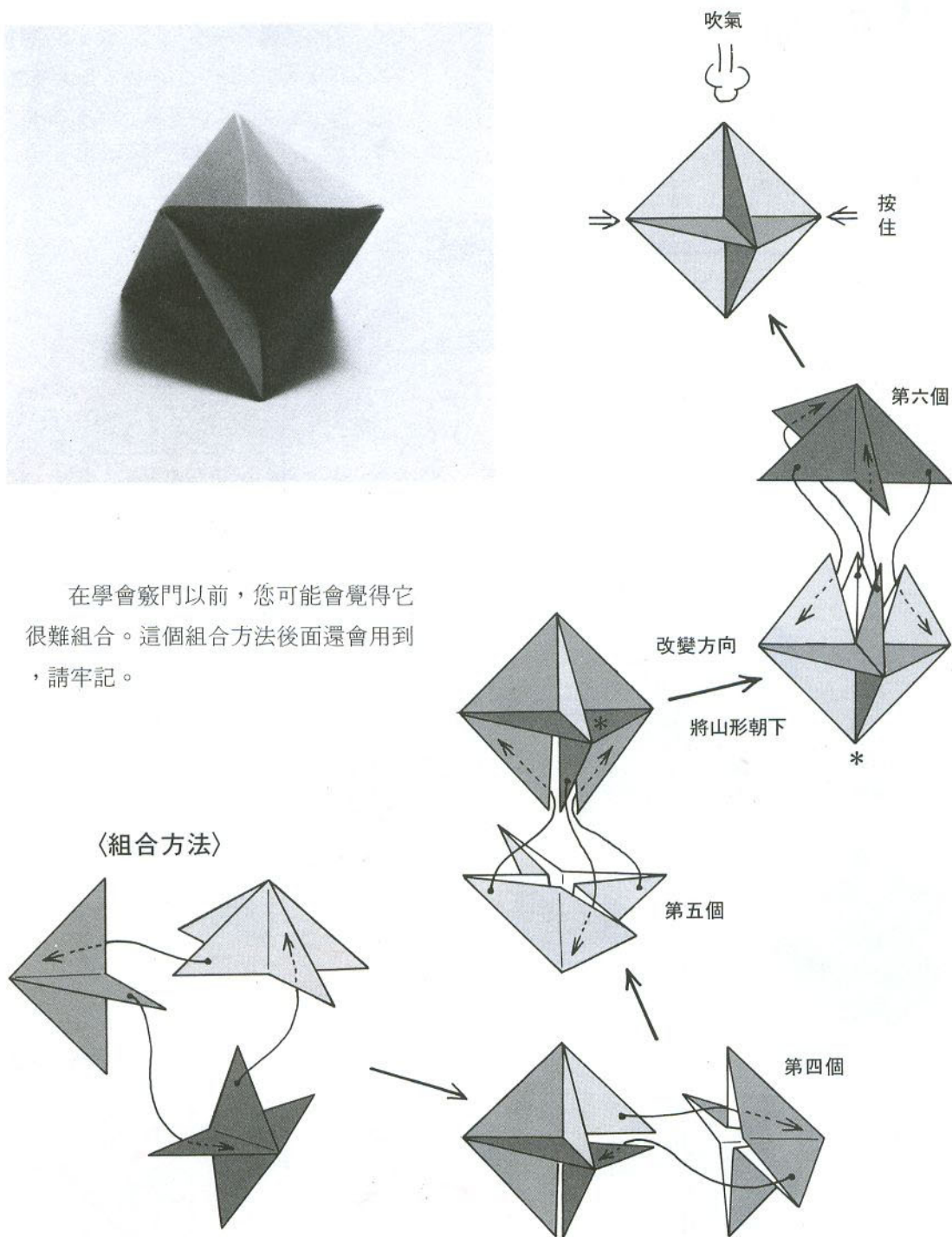
(羅勃·尼爾作)

按住陀螺兩端吹氣，它就會轉個不停。也可以用線將它吊起來當裝飾品。如照片所示，當您從不同的角度去看它，就會有迥然不同的感覺。



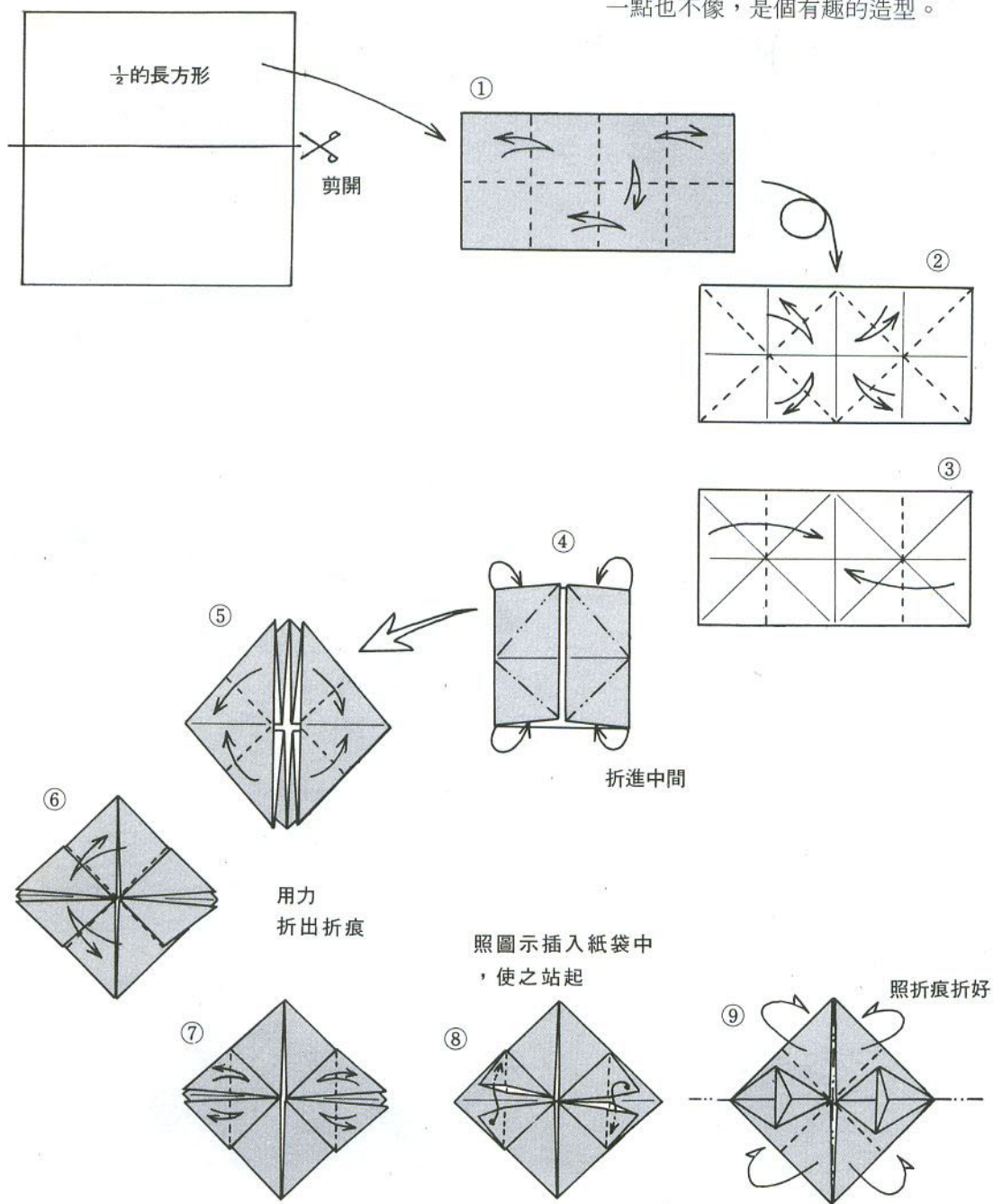


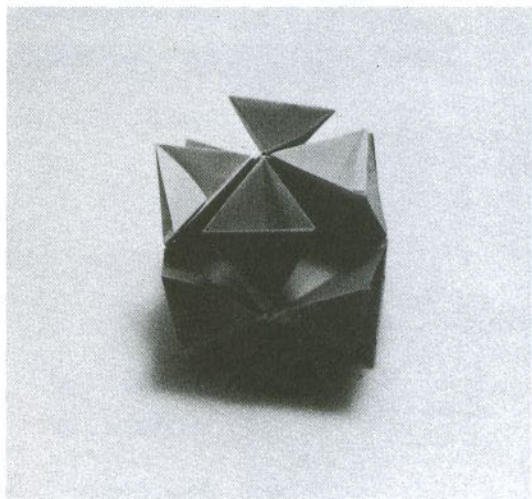
在學會竅門以前，您可能會覺得它很難組合。這個組合方法後面還會用到，請牢記。



吹陀螺之二

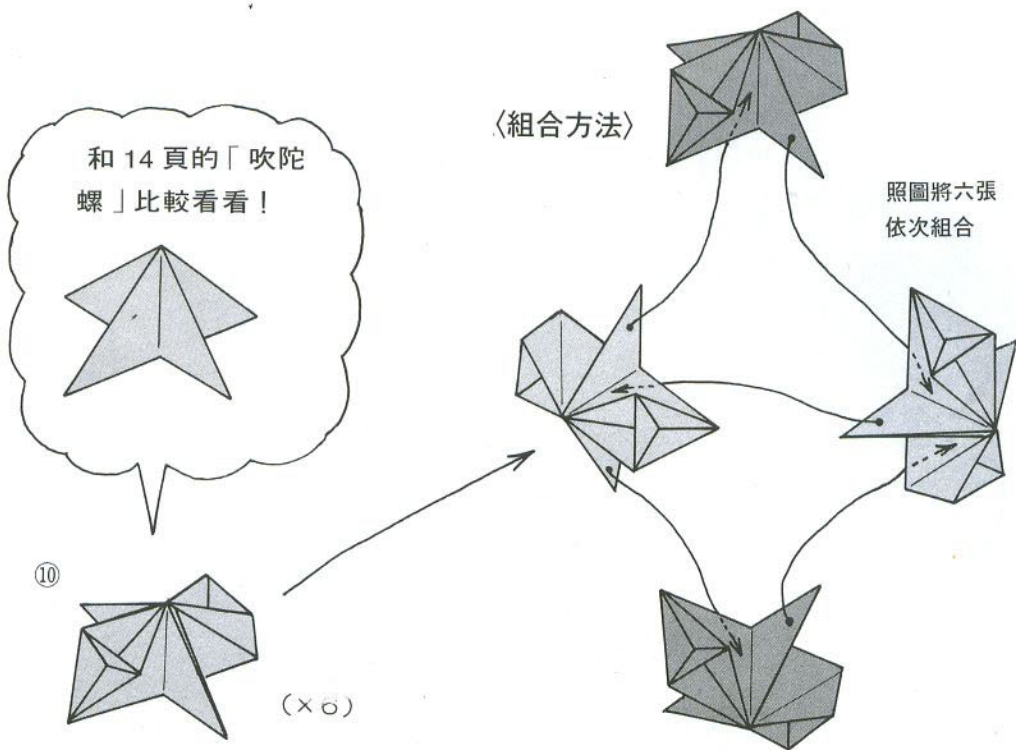
這是將前面的「吹陀螺」加以裝飾改良成的。組合方法不變，但和前者卻一點也不像，是個有趣的造型。





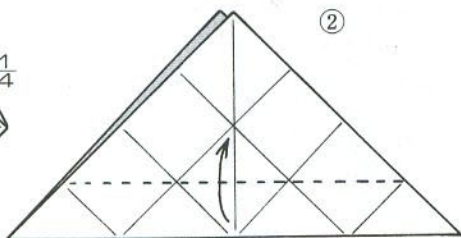
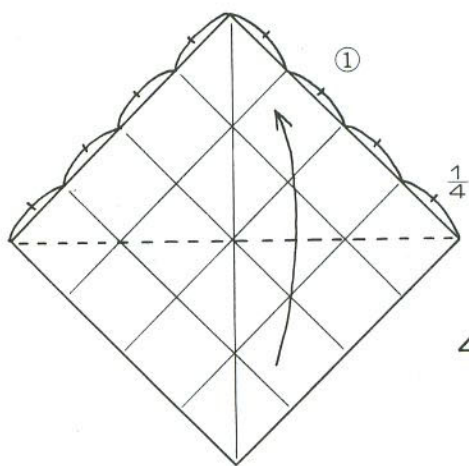
組合方法和「吹陀螺」一樣，如果不明白，可以參考 15 頁，以免被一些裝飾花樣搞迷糊了。

不過，這個可不能像「吹陀螺」一樣拿來吹著玩。

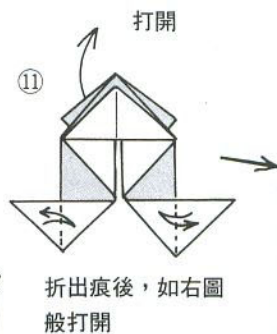
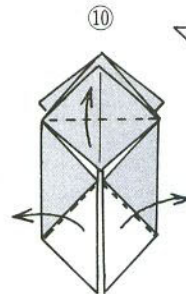
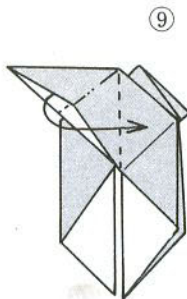
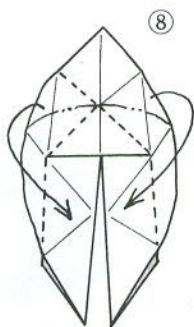
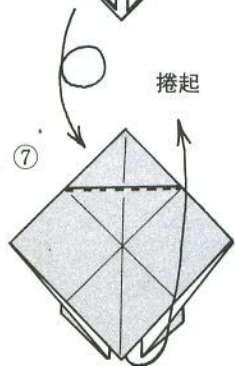
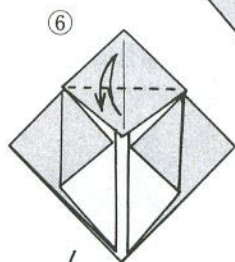
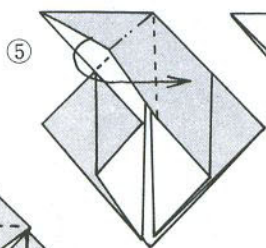
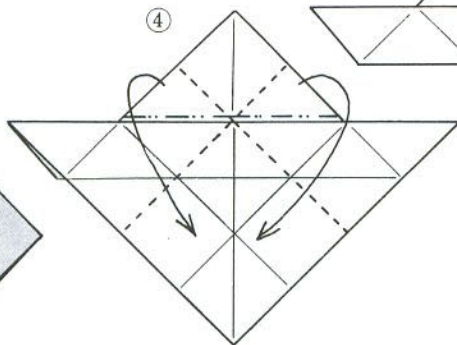
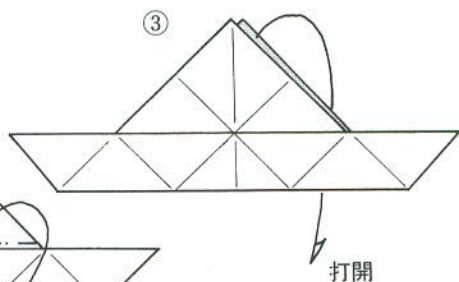


南瓜

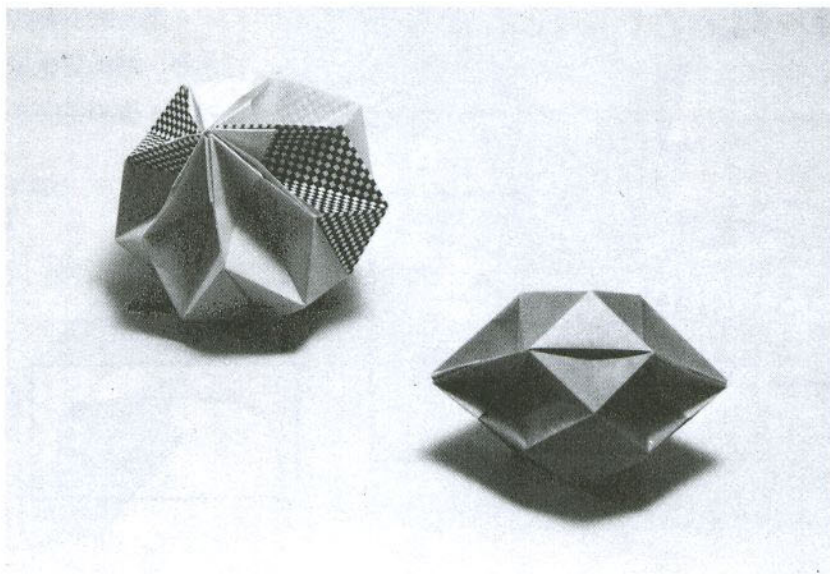
這是個像南瓜，並帶有幽默趣味的立體造型。如果張數增加，南瓜會變得更大。



先依圖所示，折出折痕，再對折。



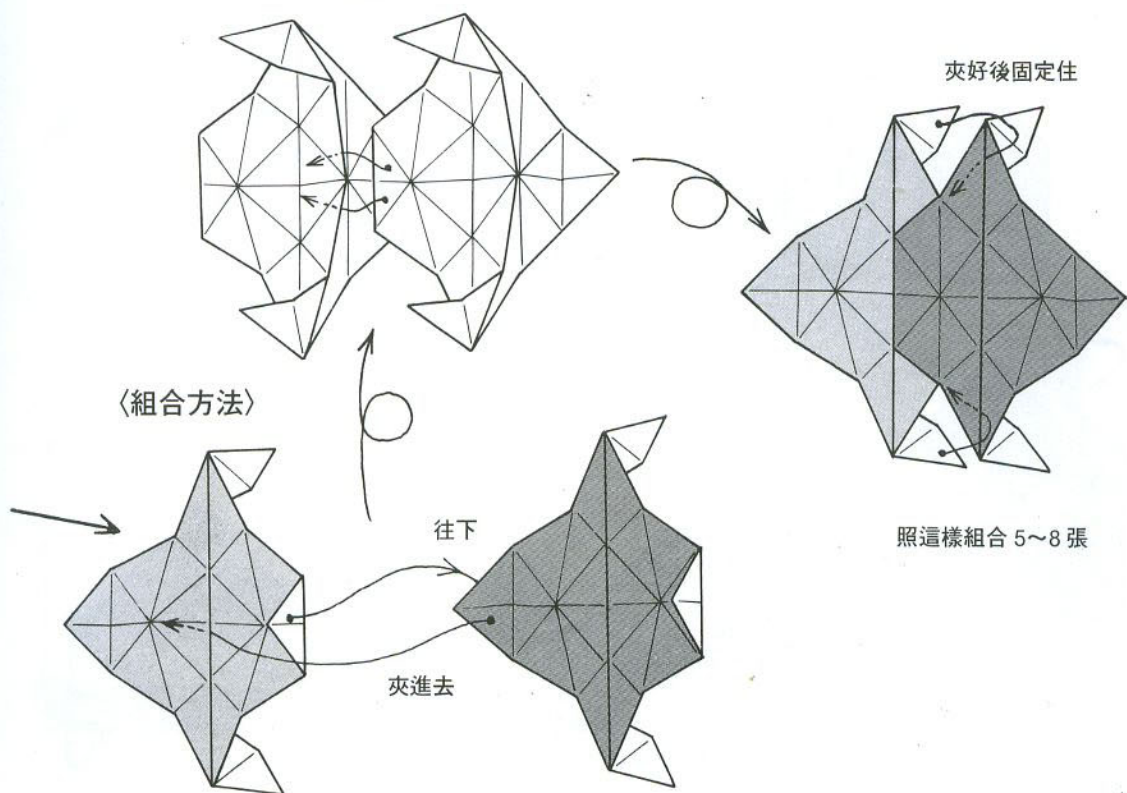
左：7張組合
右：5張組合



背面也要夾進去

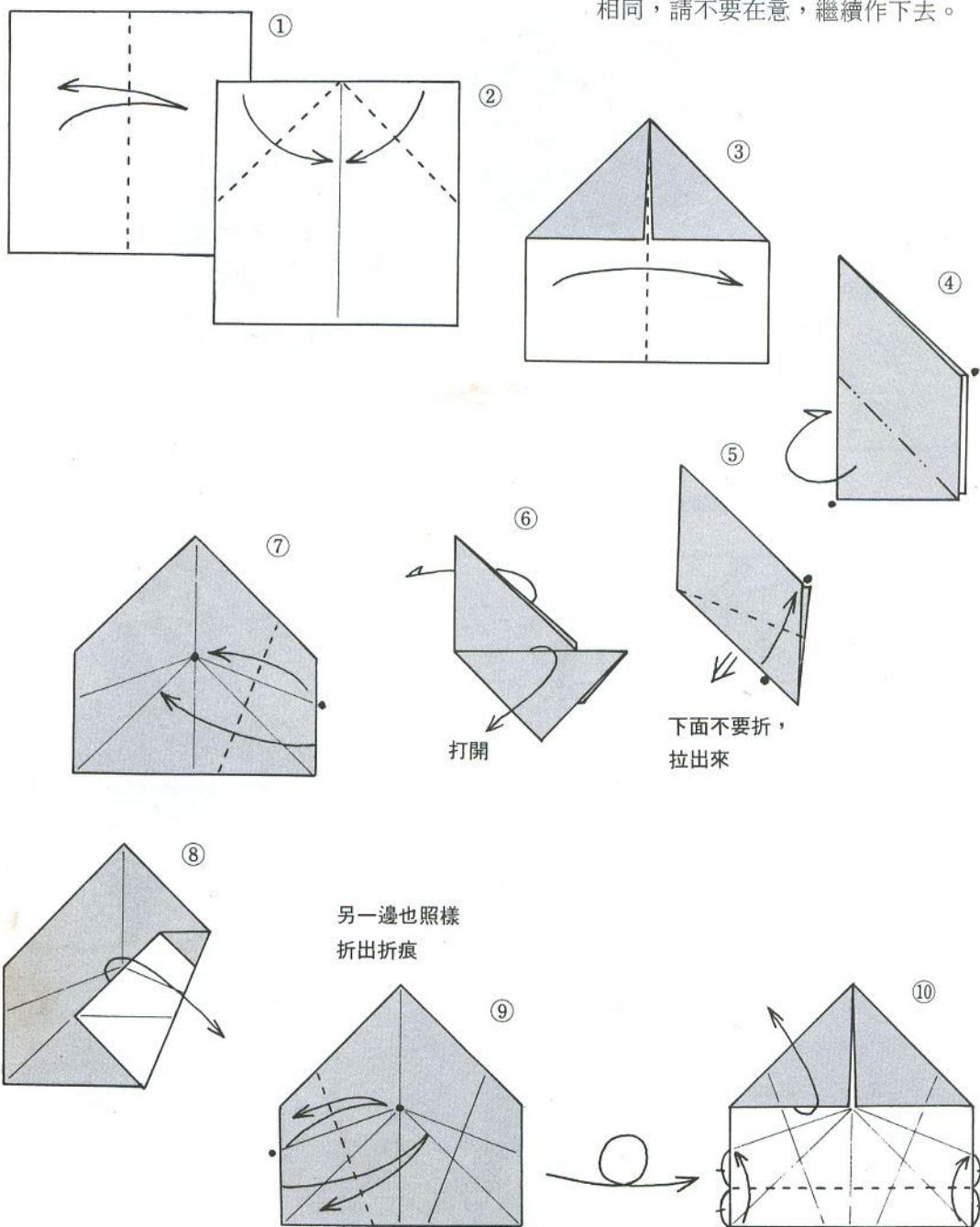
夾好後固定住

〈組合方法〉

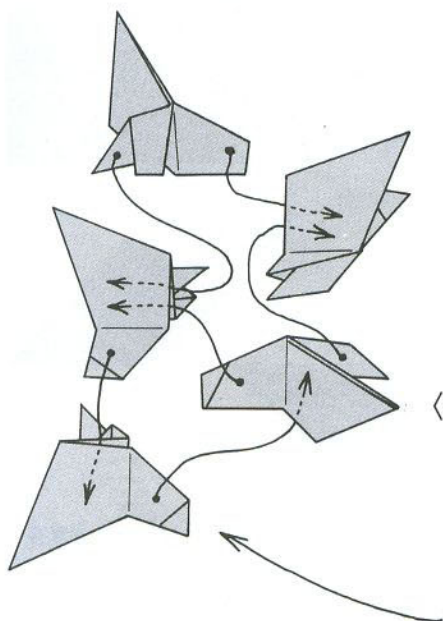
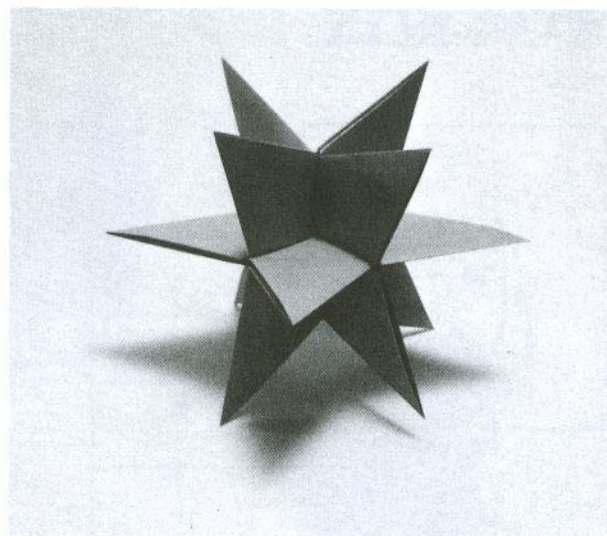


星光

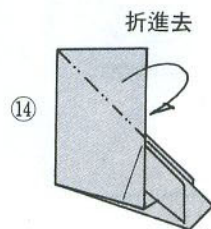
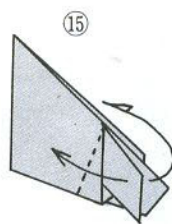
將快快不樂的時候比擬成星光。雖然每一個紙型要插入的折翼其形狀皆不相同，請不要在意，繼續作下去。



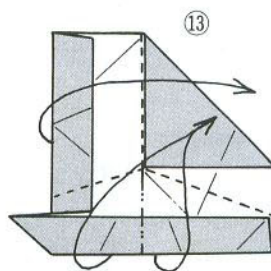
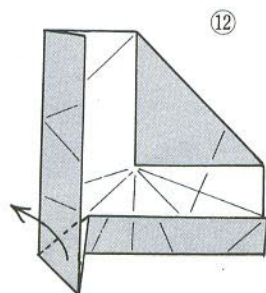
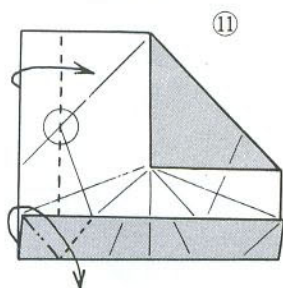
照下圖依次組合
12 張紙型



〈組合方法〉

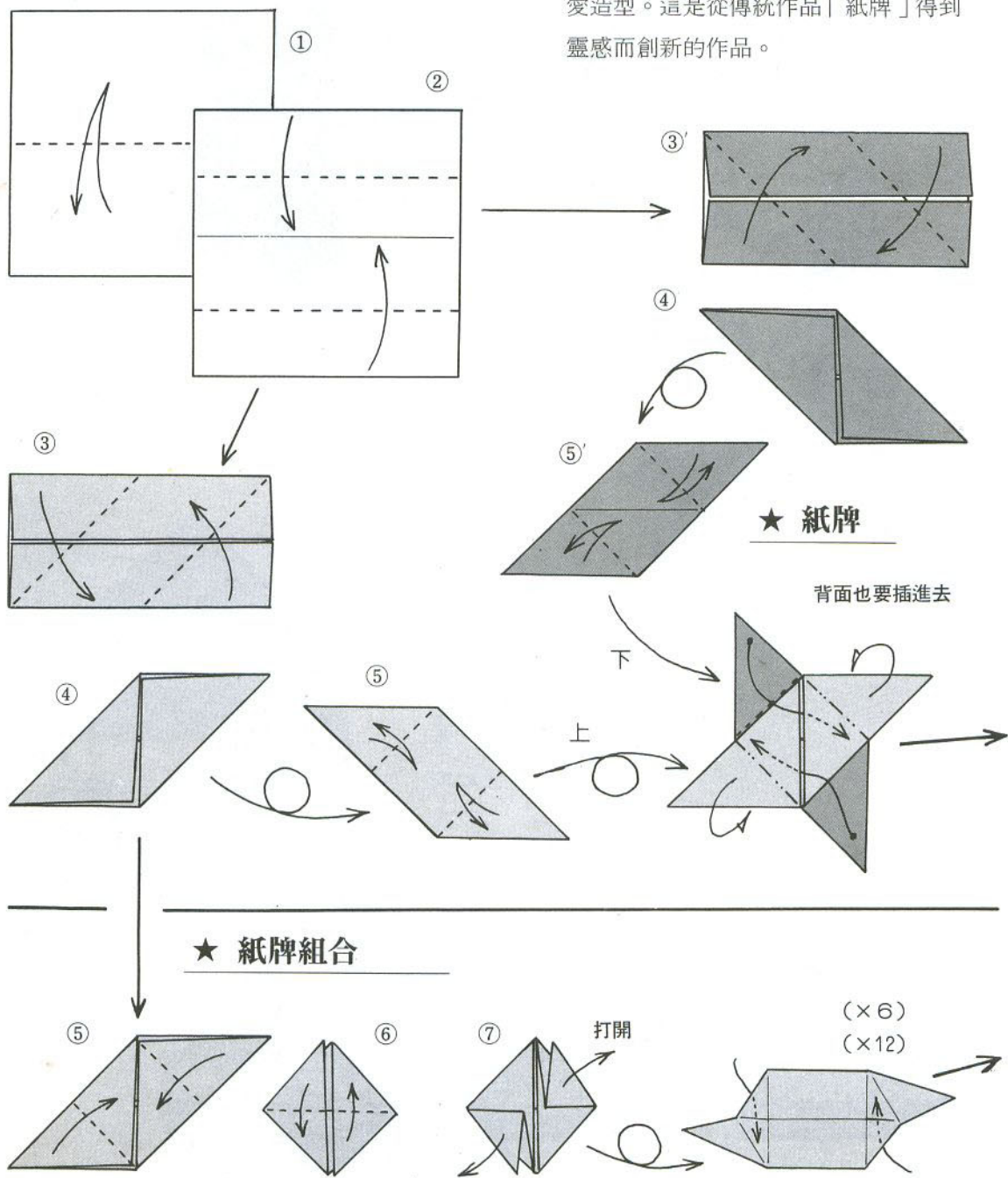


照。中的交叉點折

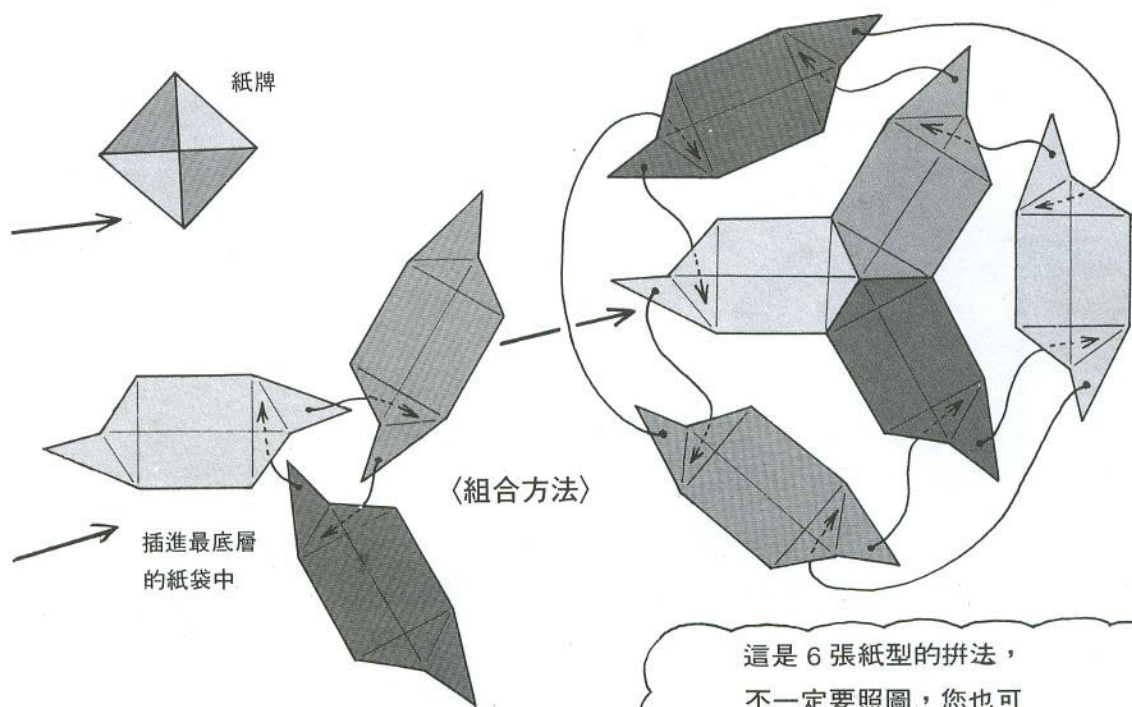
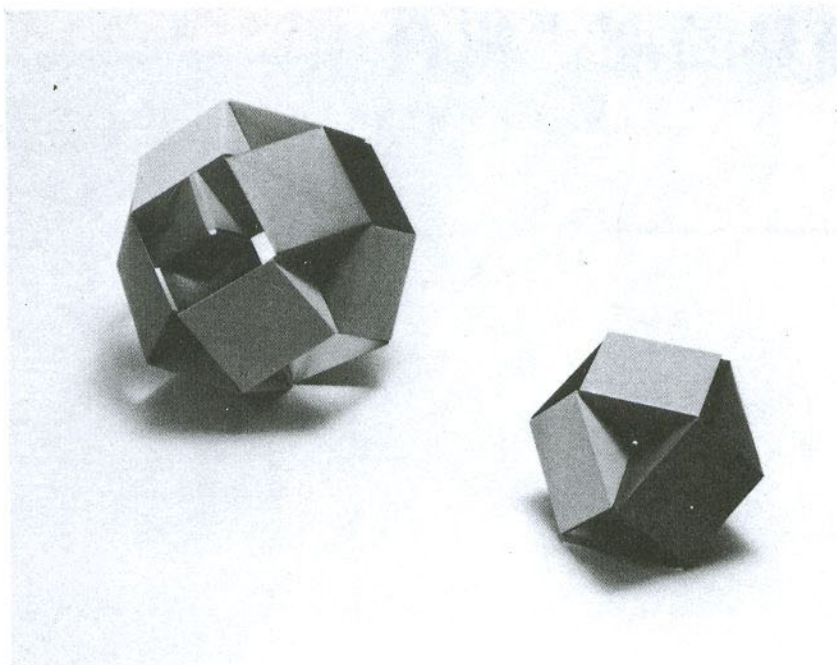


紙牌組合

可以做成紙牌，稍微改變折法，做6~12張紙型，又可組合成有凹洞的可愛造型。這是從傳統作品「紙牌」得到靈感而創新的作品。



左：12 張組合
右：6 張組合

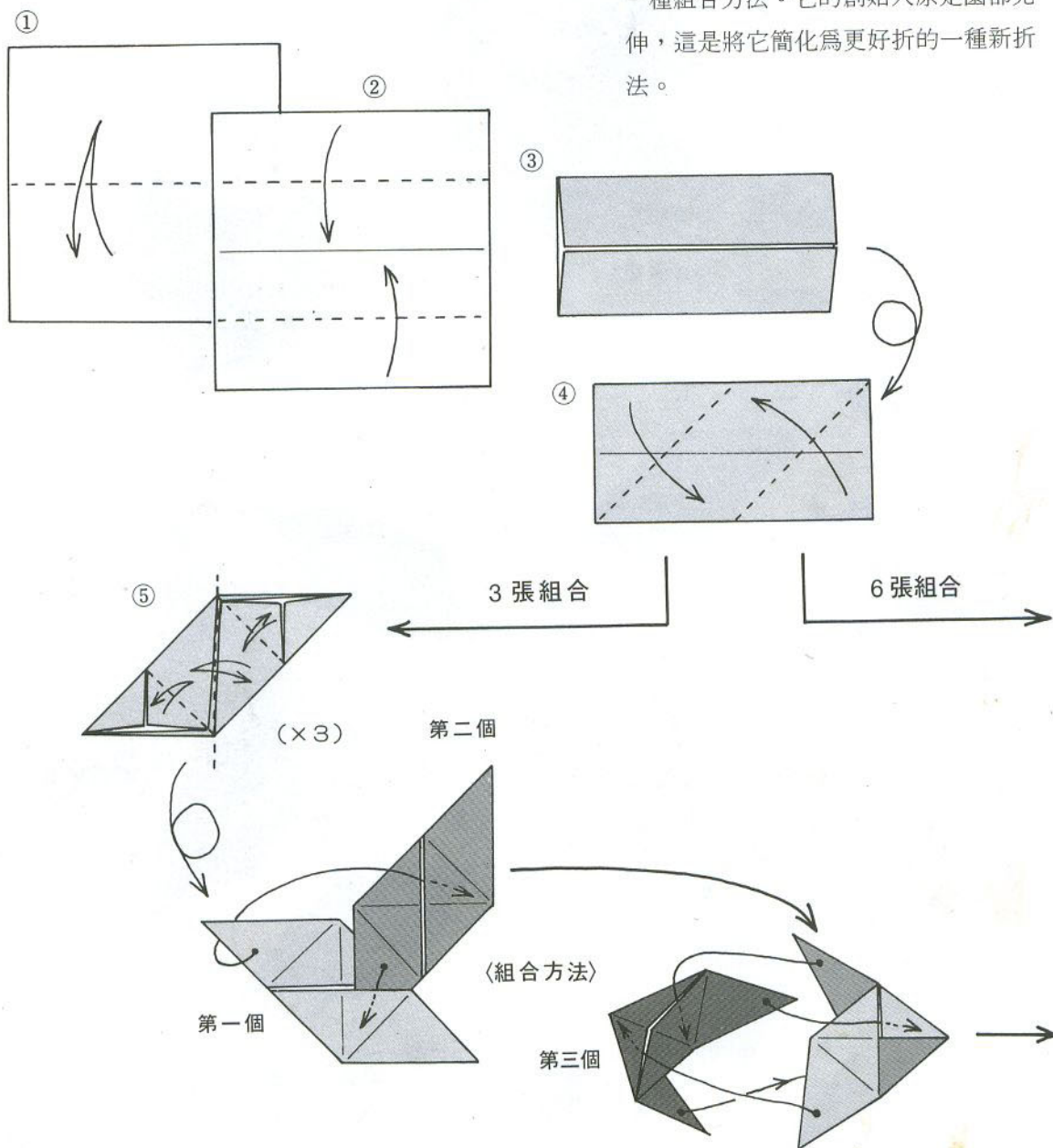


這是 6 張紙型的拼法，
不一定要照圖，您也可
隨意拼出立體的造型。

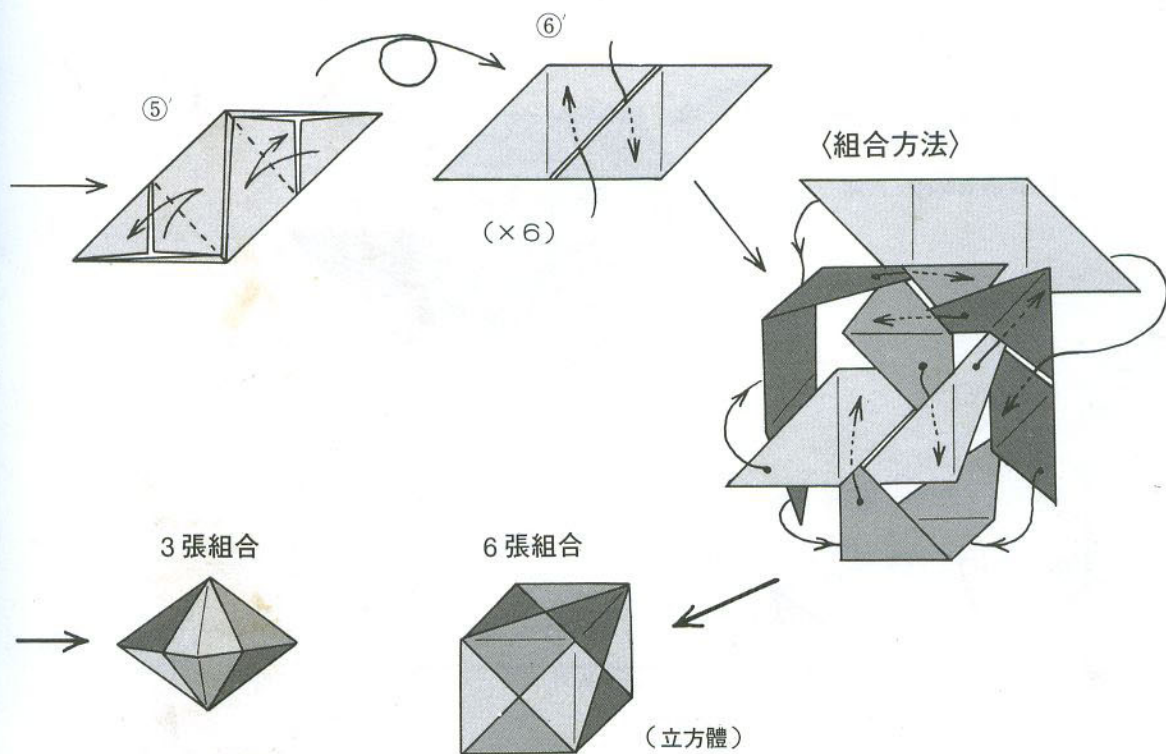
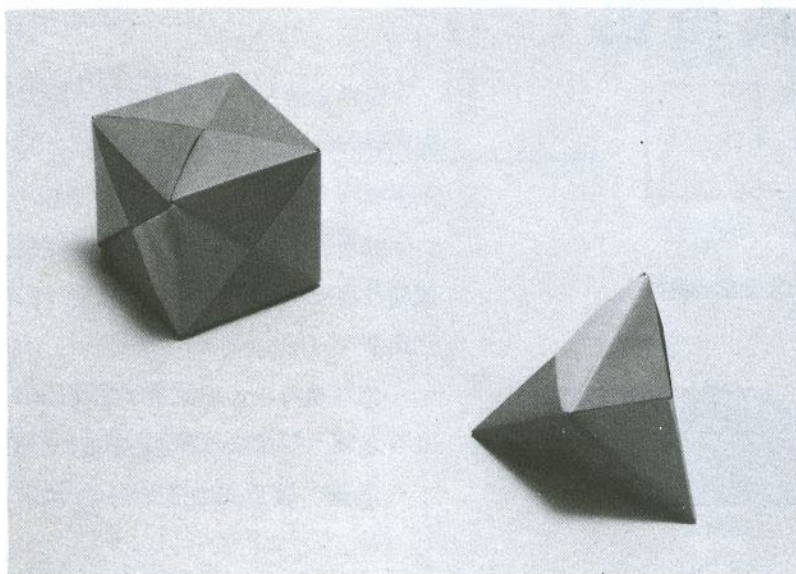
簡易菌部式組合

(笠原邦彥所創)

「菌部式」是世界上最為人熟知的一種組合方法。它的創始人原是菌部光伸，這是將它簡化為更好折的一種新折法。



左：6張組合
右：3張組合



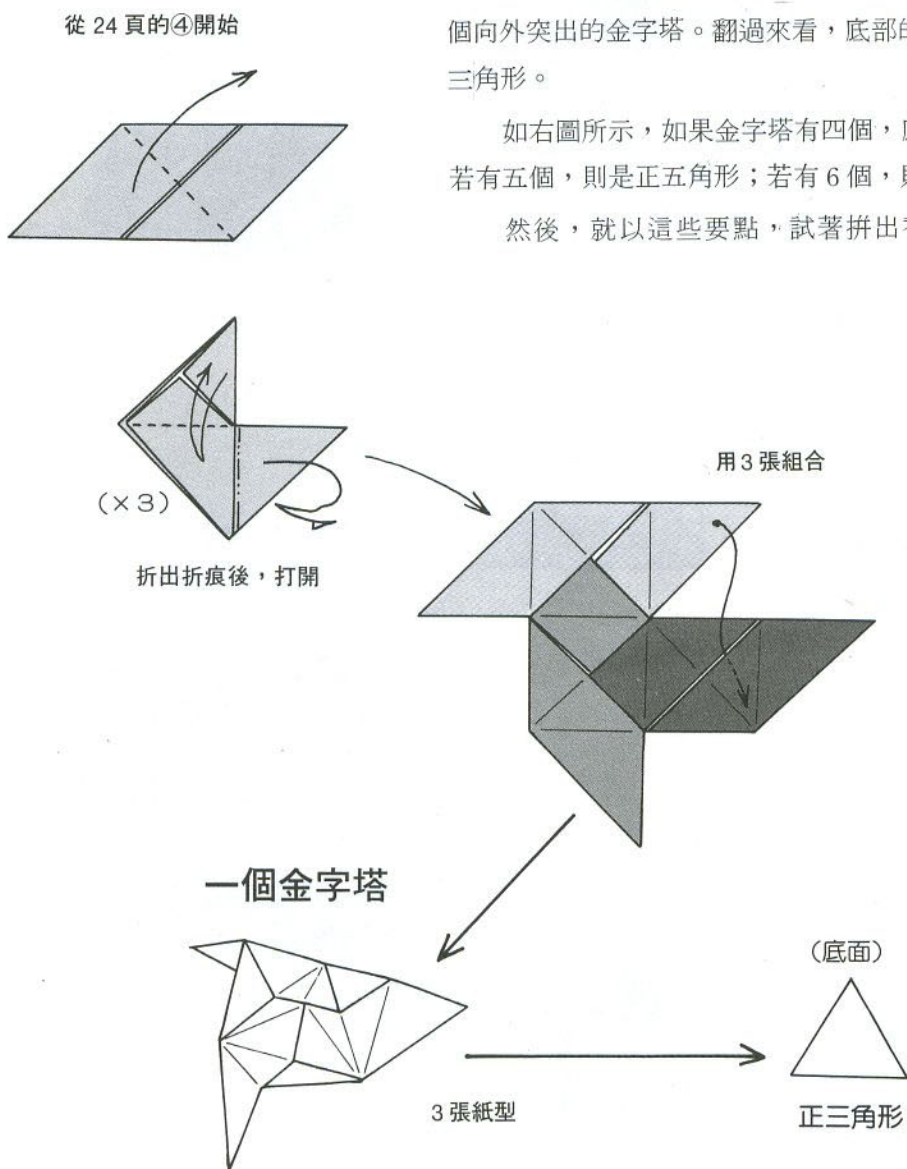
各式香包

學會 3 張及 6 張組合之後，接著是球形組合——向各種美麗的紙香包挑戰吧！在挑戰之前，以下幾點是您必須先知道的。

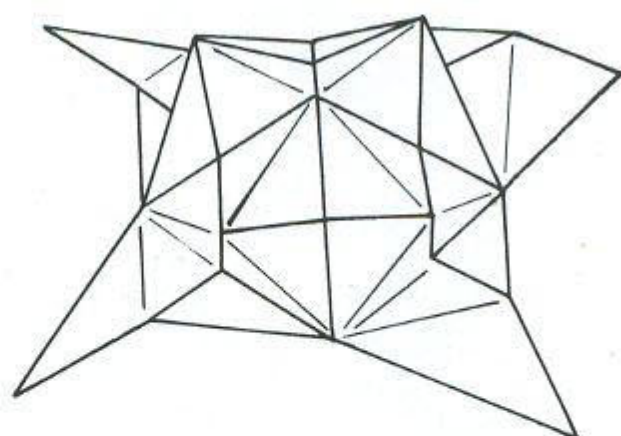
如下圖，當您將三張紙型組合完成後，正中間會有一個向外突出的金字塔。翻過來看，底部的形狀則是一個正三角形。

如右圖所示，如果金字塔有四個，底面就呈正方形；若有五個，則是正五角形；若有 6 個，則是正六角形。

然後，就以這些要點，試著拼出香包吧！



四個金字塔



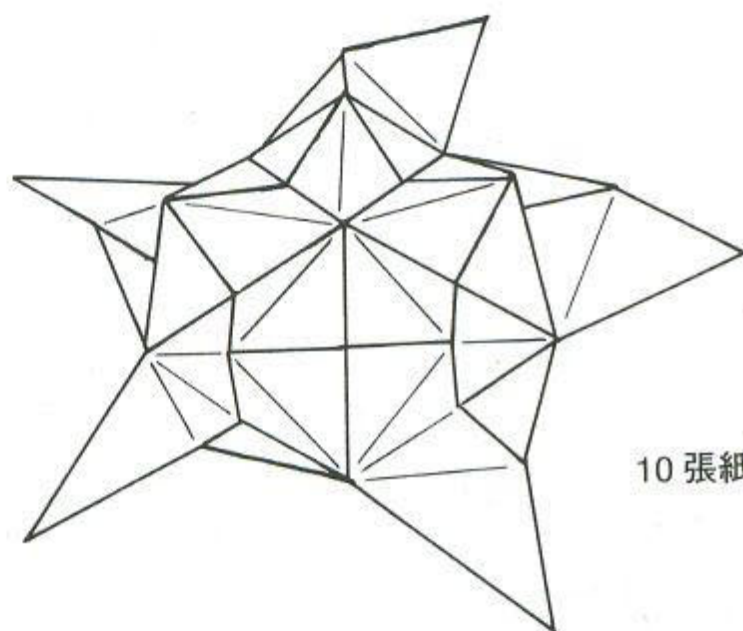
8 張紙型

(底面)



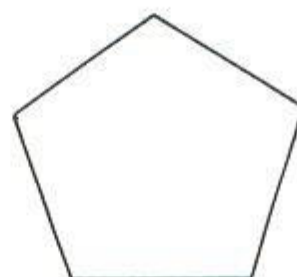
正方形

五個金字塔



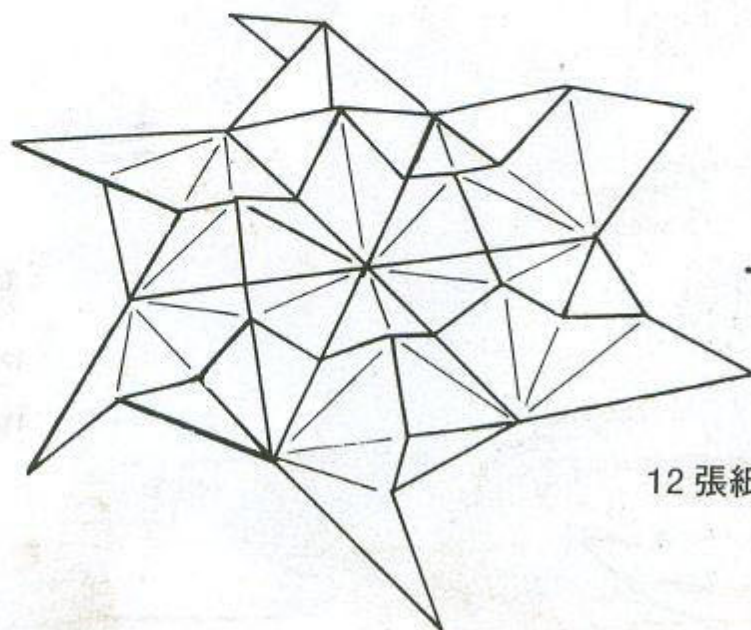
10 張紙型

(底面)



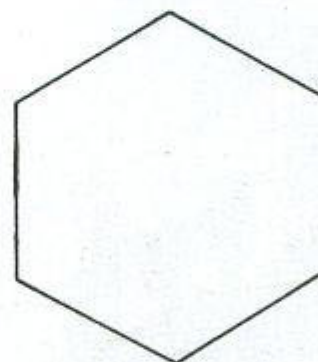
正五角形

六個金字塔

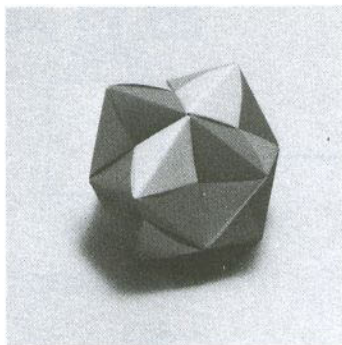


12 張紙型

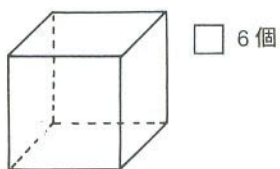
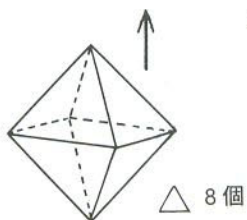
(底面)



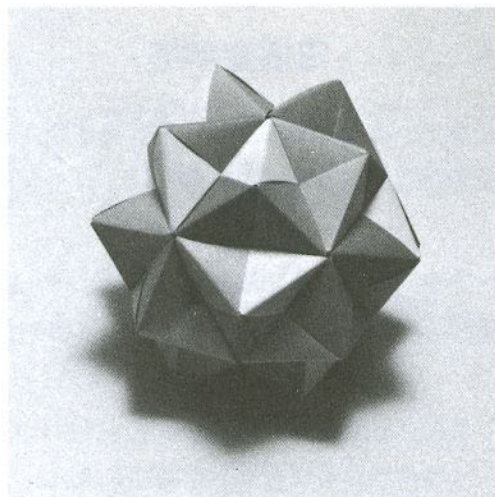
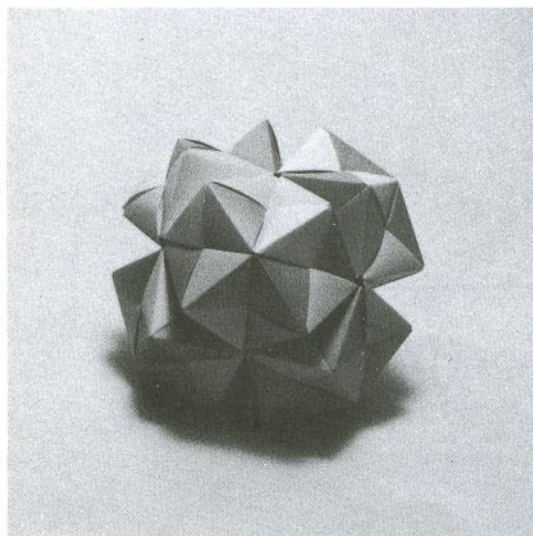
正六角形



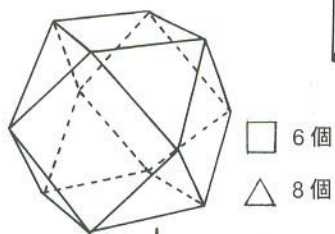
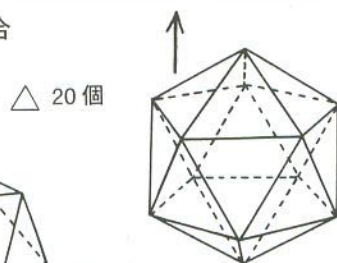
▲ 12 張組合



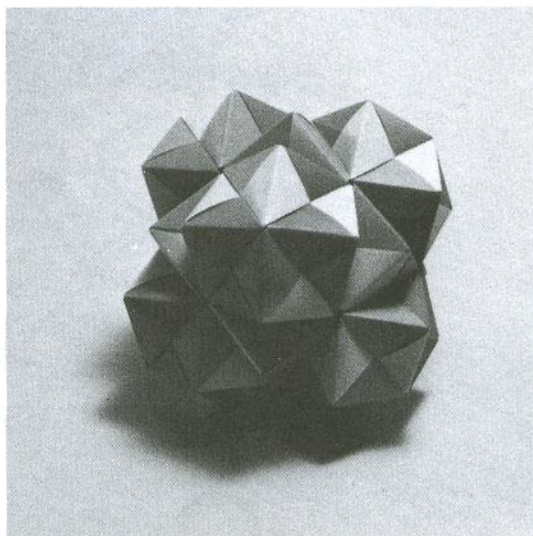
▼ 36 張組合



▲ 30 張組合



▼ 48 張組合



以上這些組合的方法及構想，是經過這個「簡易藺部式」的發明人笠原邦彥，以及寺田德重，松崎雅夫等，許多人的苦心研究而得，在此介紹的只是其中的一部份而已。因此，可能有許多人早已知道這些組合方法了。

不過，如果有人是初次接觸，並想得到更深入了解的話，可以參考以下二本書。在這二本書中，也談到這個紙型的其他組合方法。

「最新折紙集匯」

日本文藝社

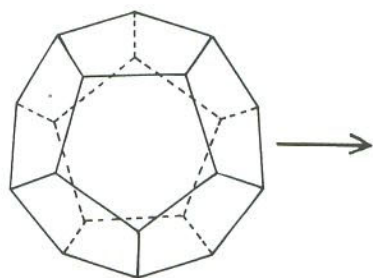
笠原邦彥著

「尖端折紙」

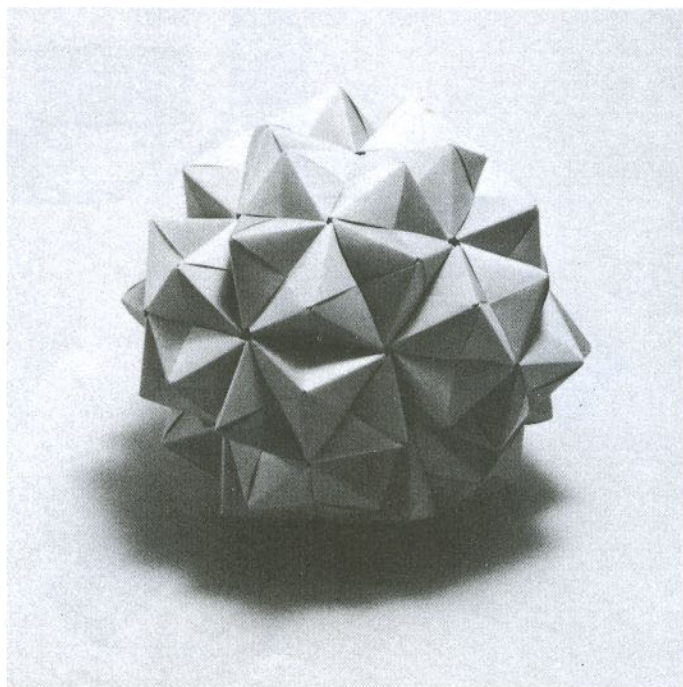
聖立歐出版

高濱利惠監修 笠原邦彥著

▼ 90 張組合

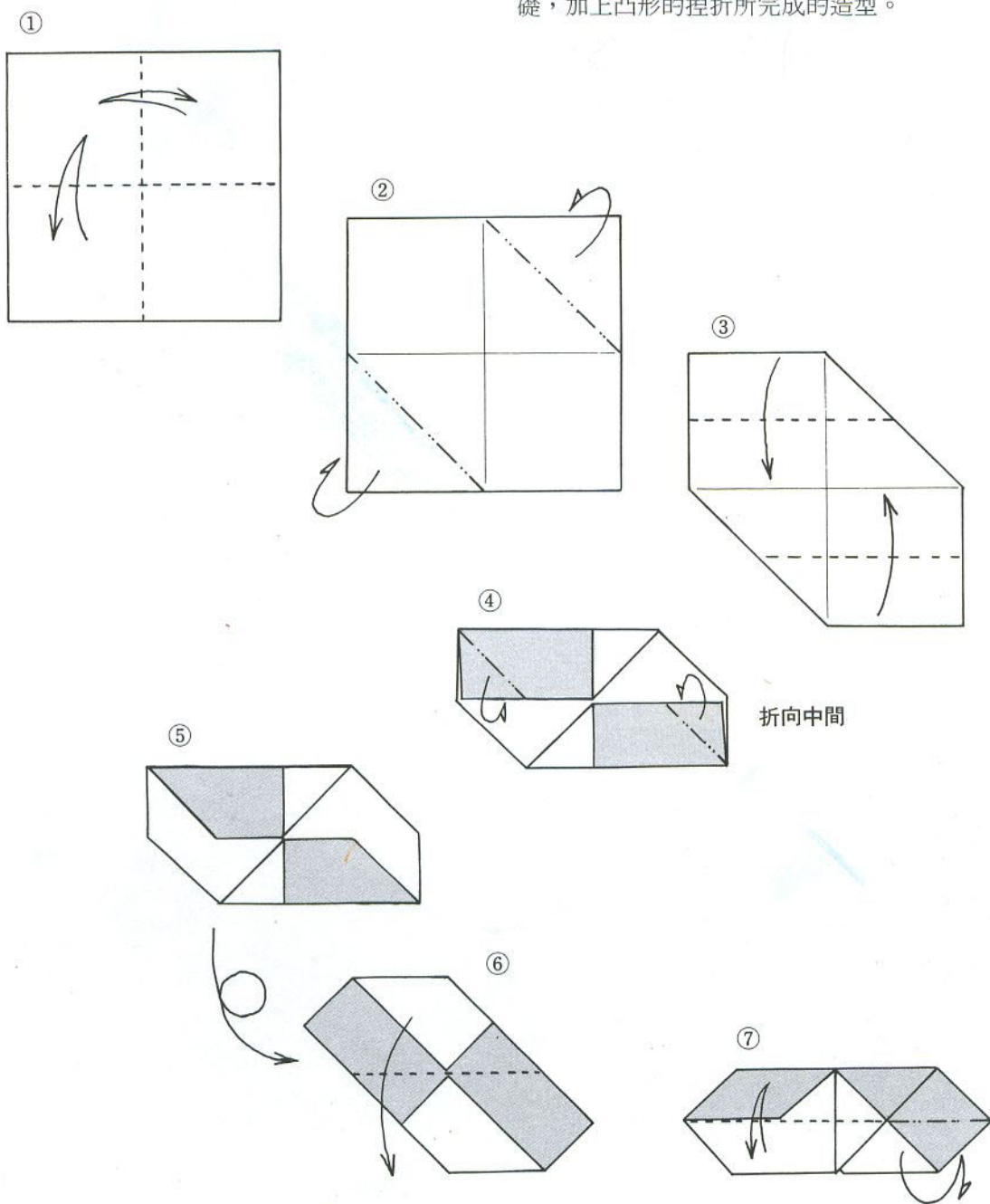


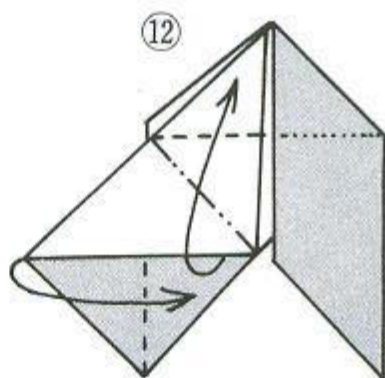
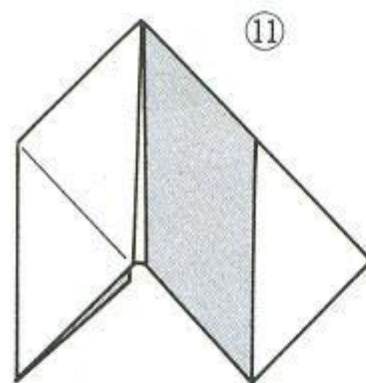
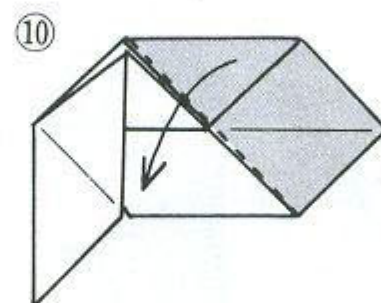
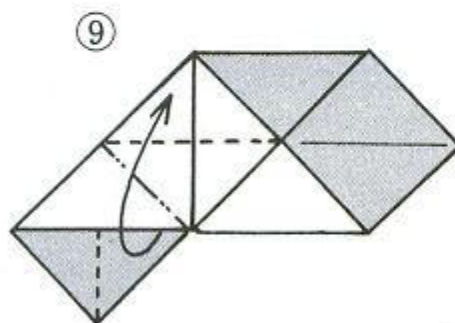
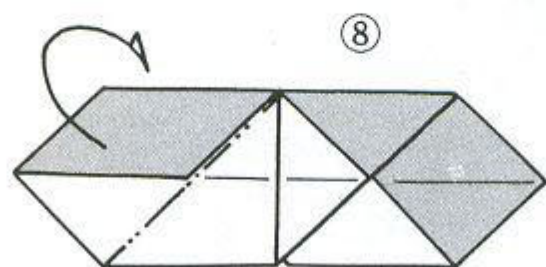
五邊形 12 個



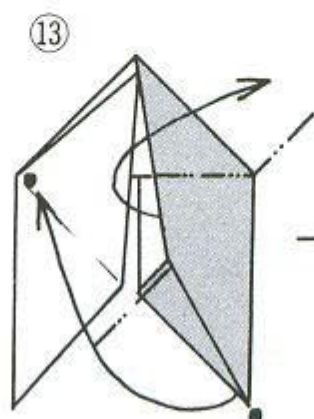
捏折

如同 16 頁為「吹陀螺」加以裝飾一樣，這一次是以簡易菌部式紙型為基礎，加上凸形的捏折所完成的造型。

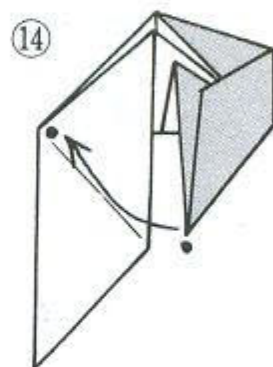




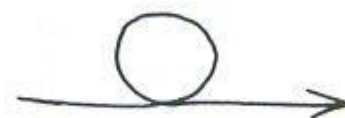
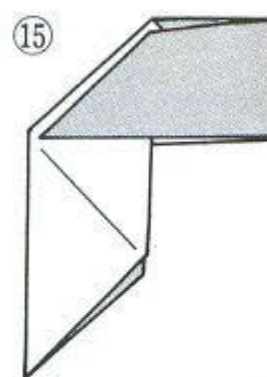
裡面也要折



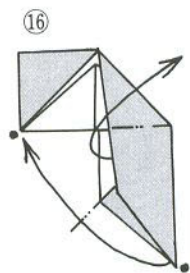
一邊打開一邊折



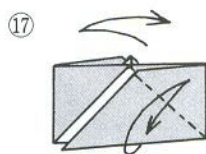
做到一半



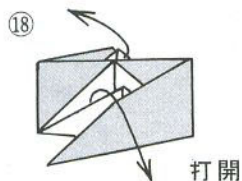
接下一頁 ➡



折法同(13)(14)



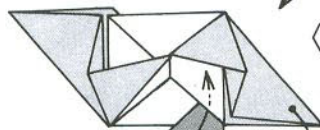
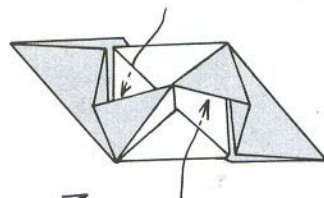
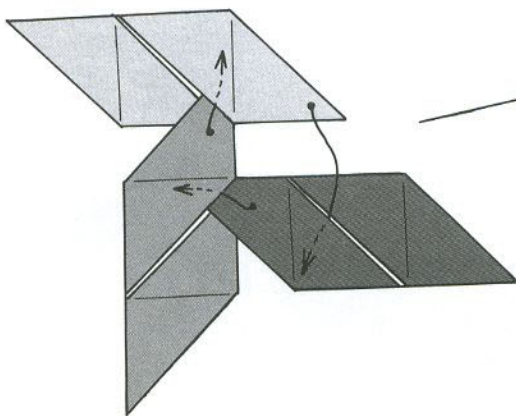
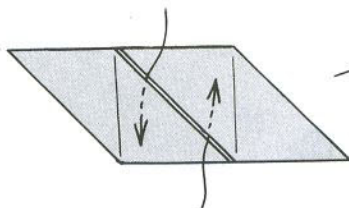
折出折痕



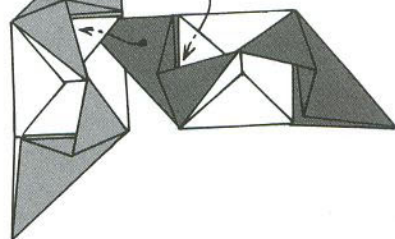
打開

比比看！

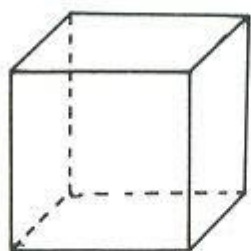
架構和 26 頁一樣，只是
左右相反



〈組合方法〉



組合張數同 24 頁的「簡易園部式」

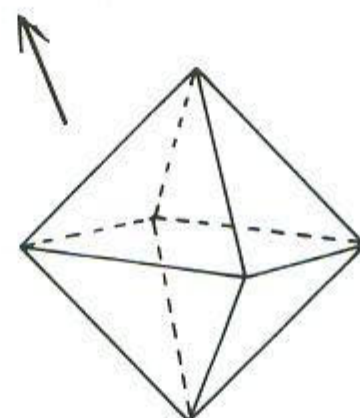
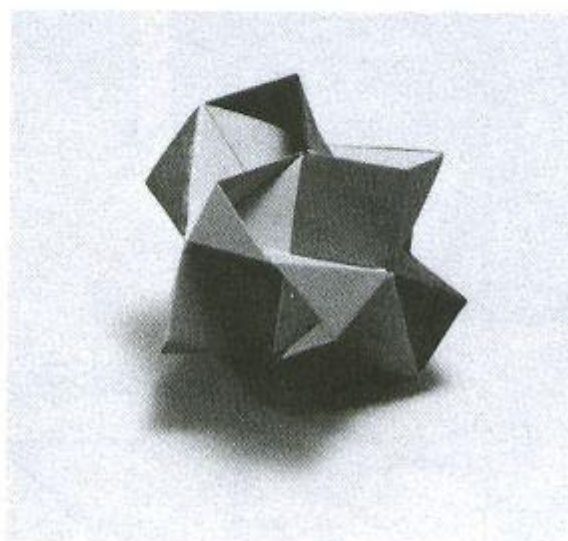
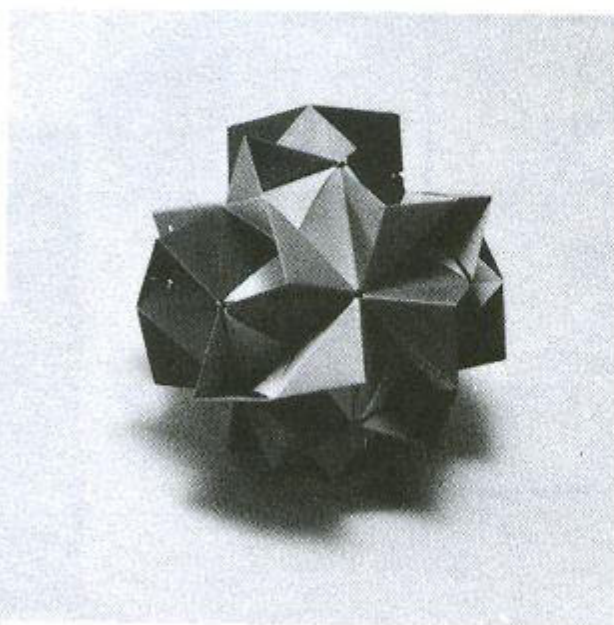


□ 6 個

▼ 12 張組合

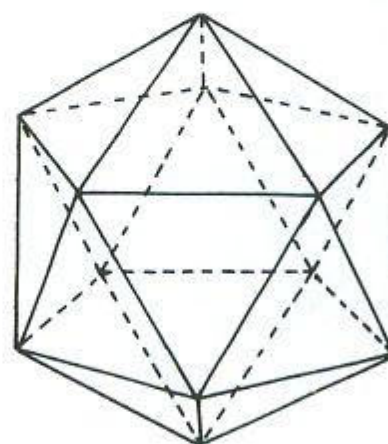
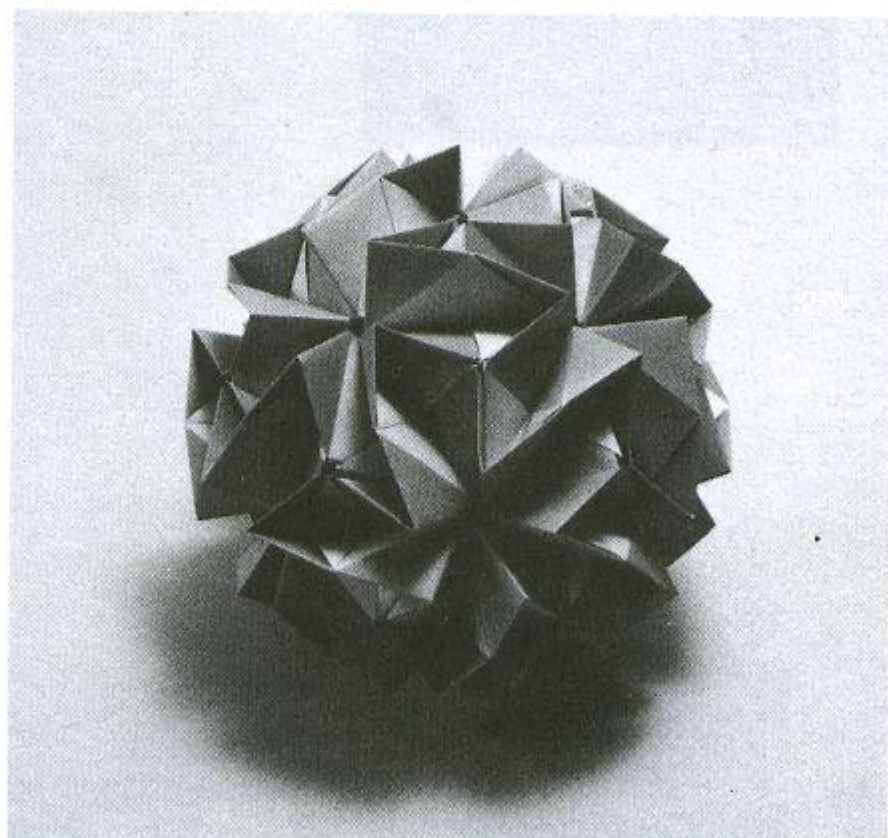


▼ 6 張組合



△ 8 個

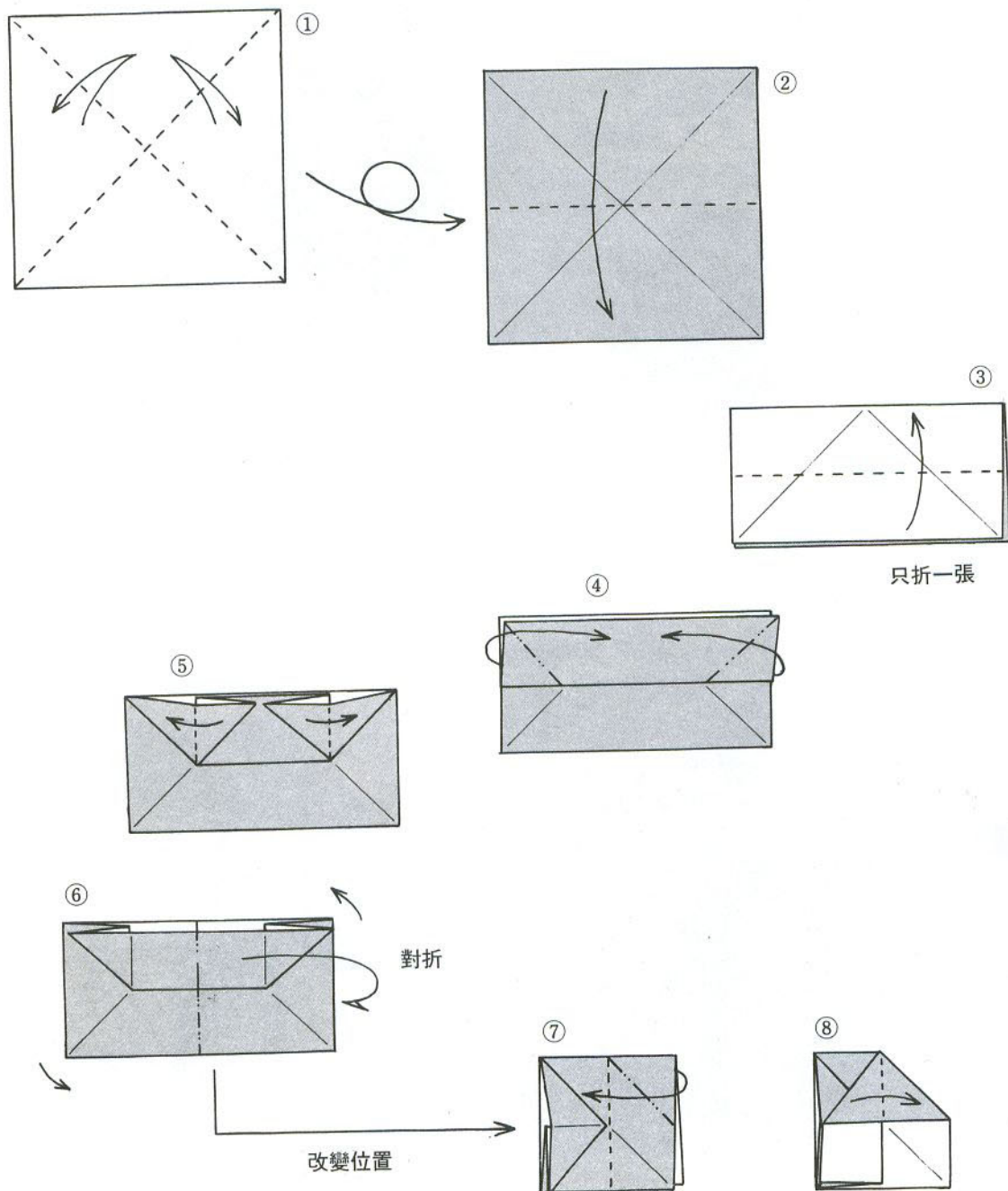
▼ 30 張組合

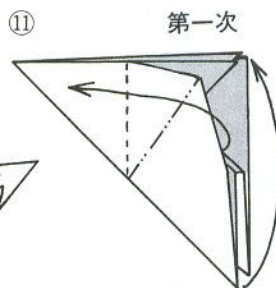
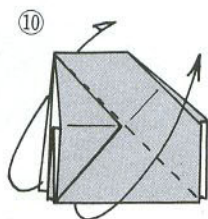
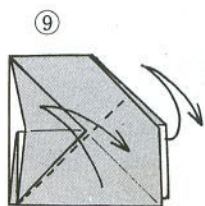


△ 20 個

花粉

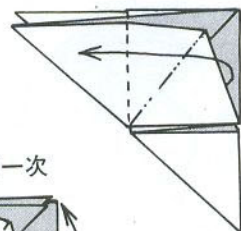
花粉其實有各種不同的形狀，而這個究竟是像哪種植物的花粉呢？





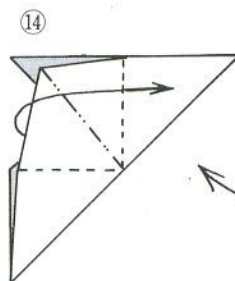
第一次

再重複二次



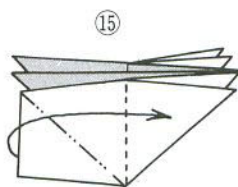
第二次

⑫



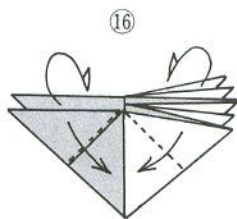
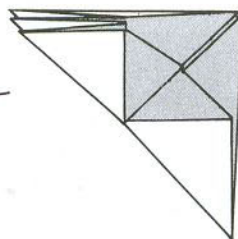
第一次

重複二次

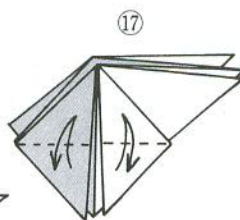


第二次

⑬

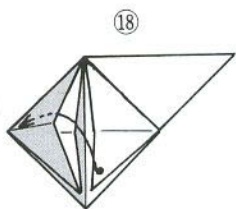


⑮

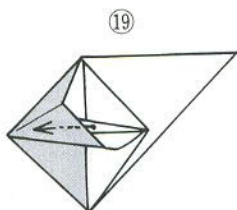


⑮

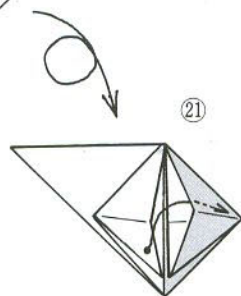
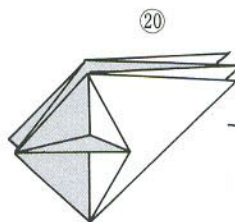
接下一頁 ➡



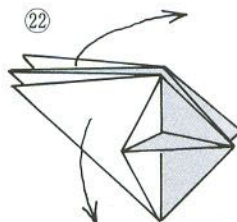
一邊將之立起
將一角插進紙袋中



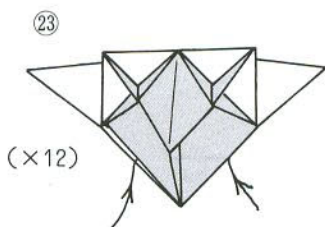
做到一半



另一邊也是
同樣折法

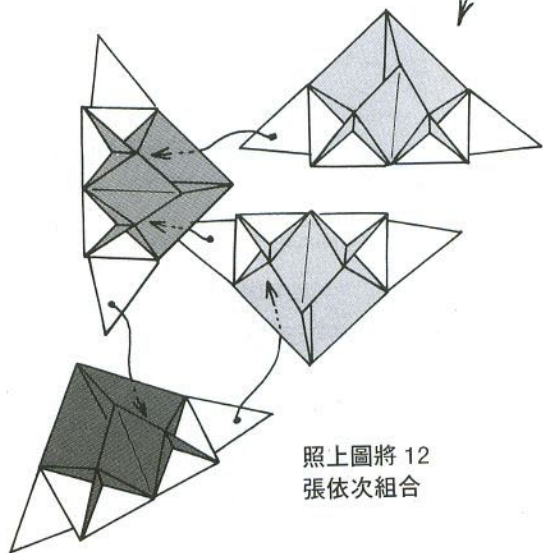


打開

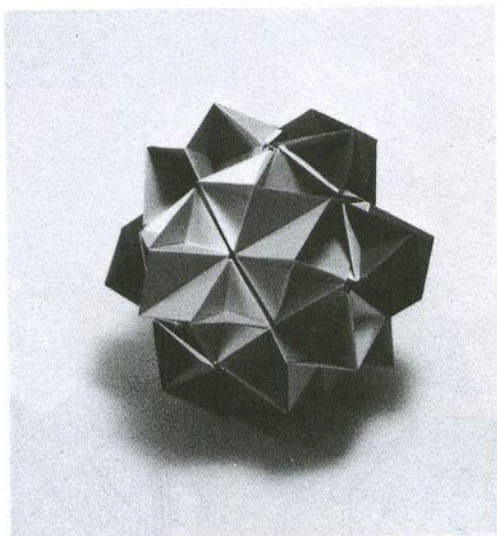


(×12)

〈組合方法〉

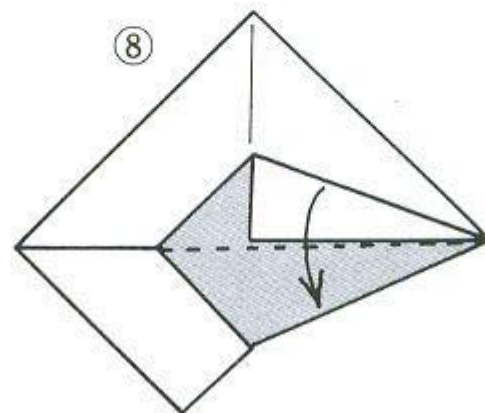
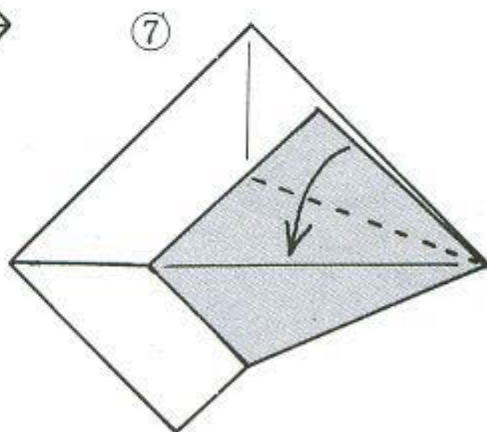
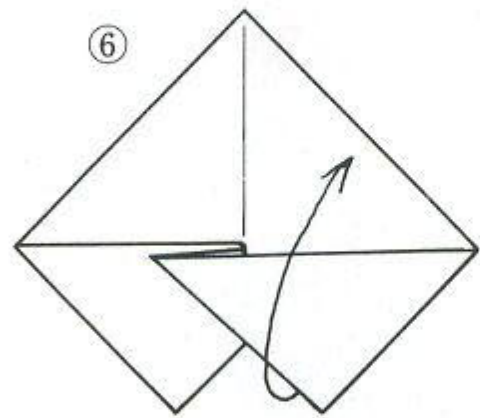
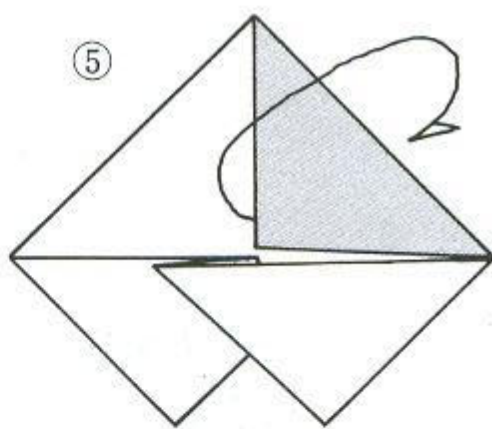
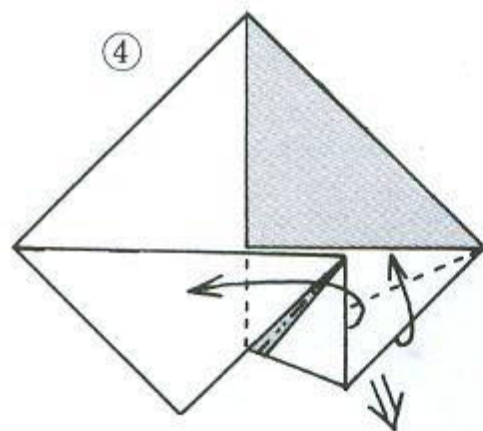
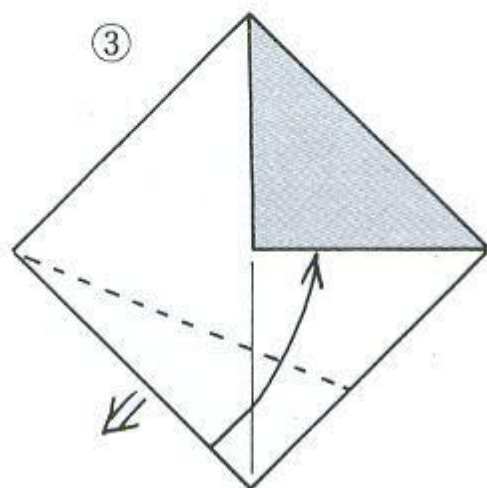
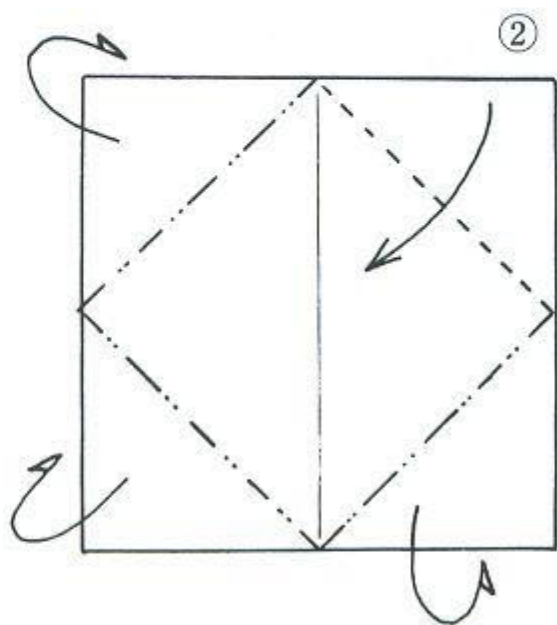
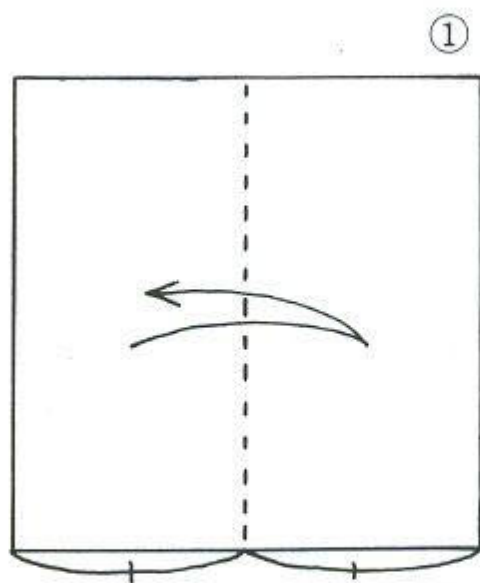


照上圖將 12
張依次組合

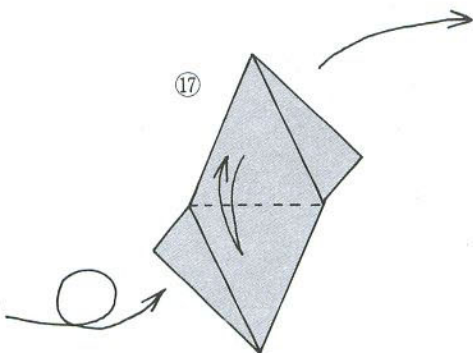
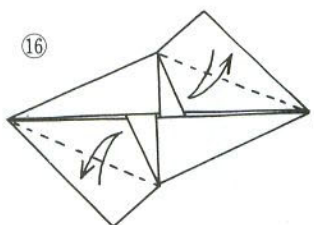
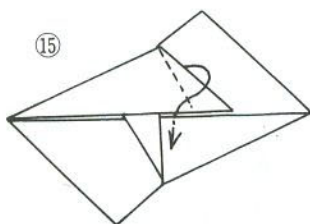
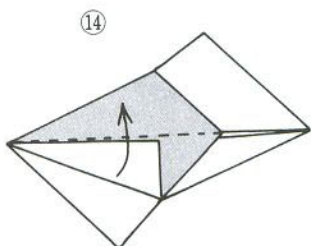
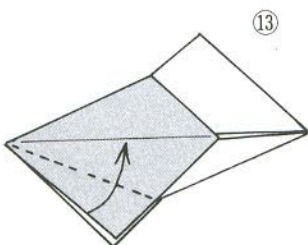
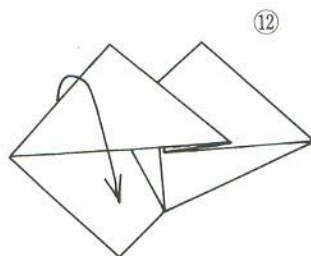
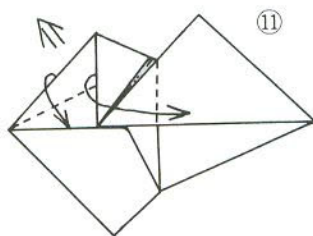
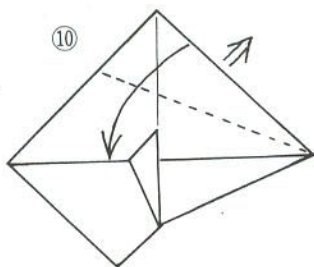
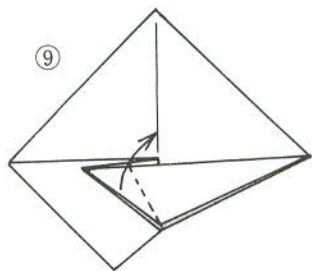


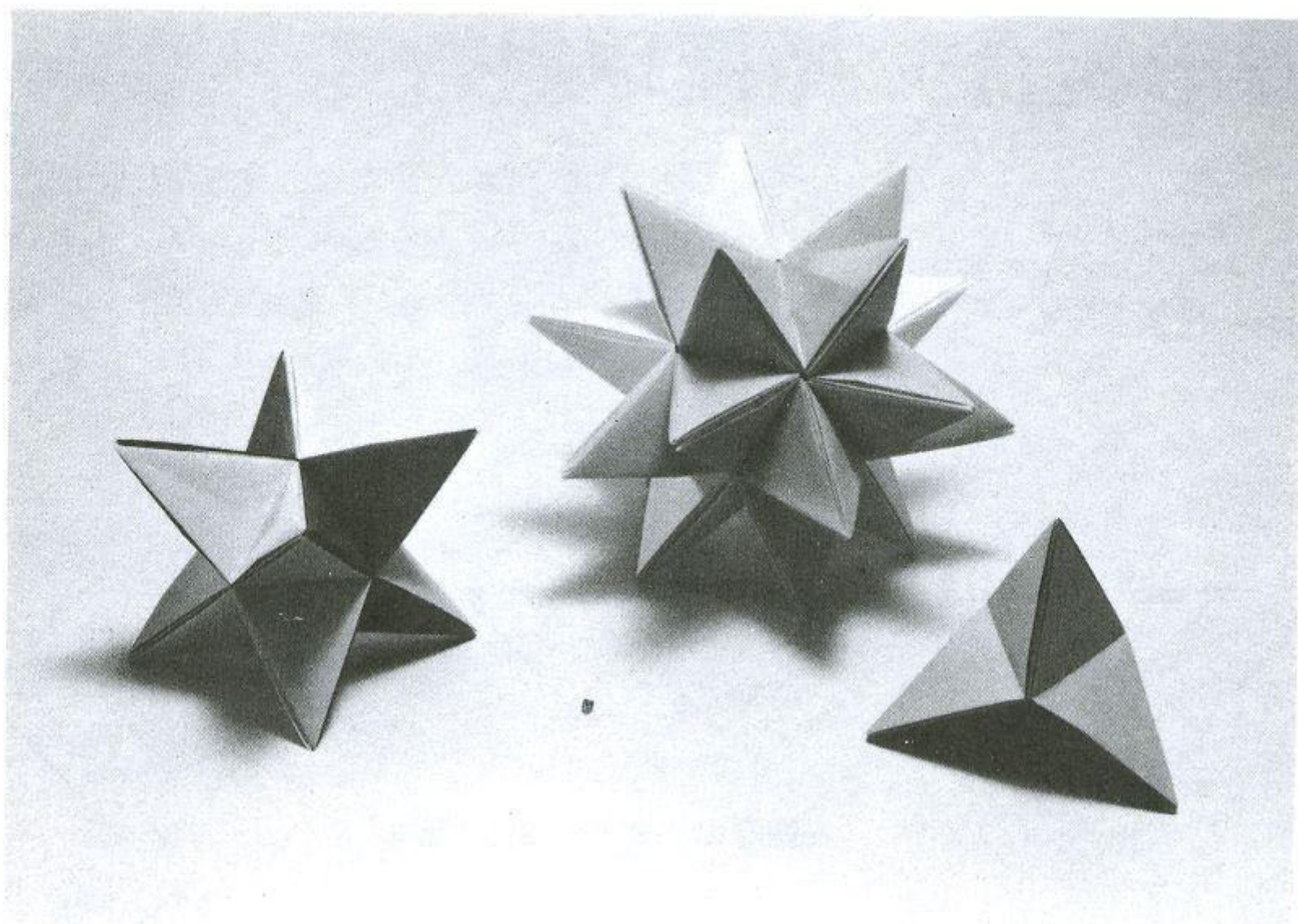
菱形組合

這個菱形是由兩個三角形連在一起構成的。步驟①～③要仔細用心地做，完成後表面才不會有多出來的線條。



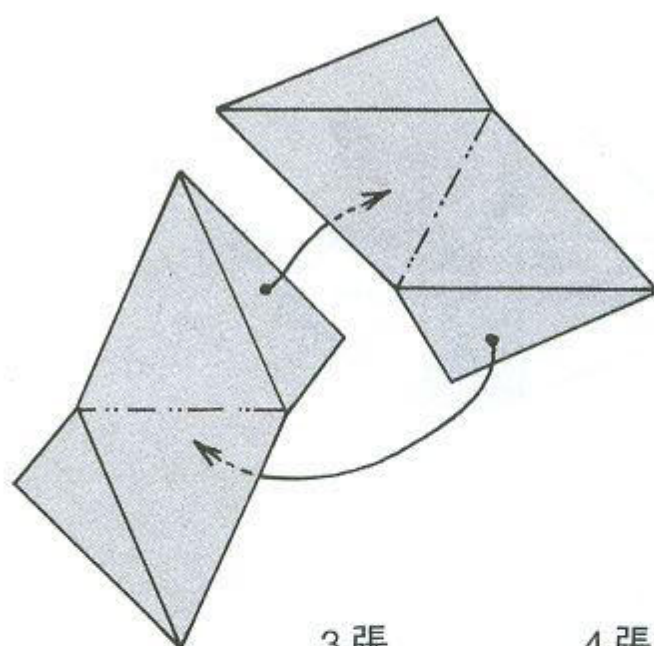
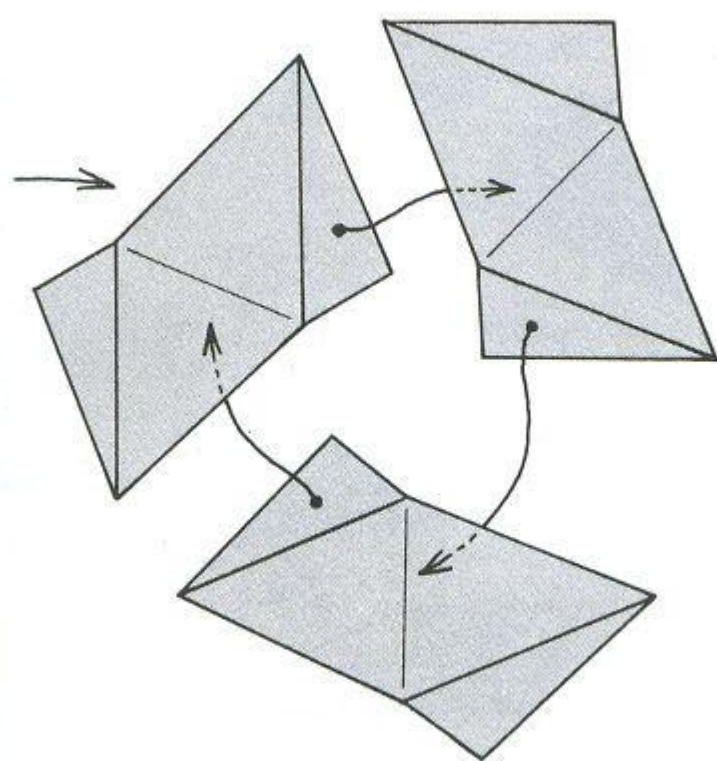
接下一頁 ➡





▲ 左起：12 張、30 張 6 張組合

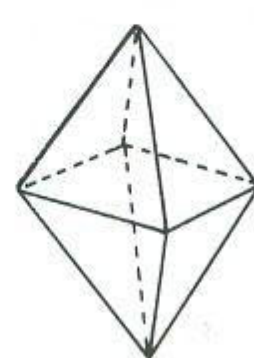
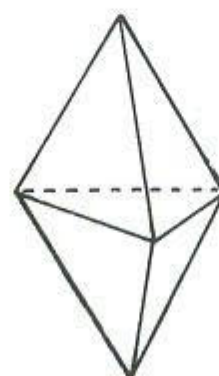
〈組合方法〉



3 張

4 張

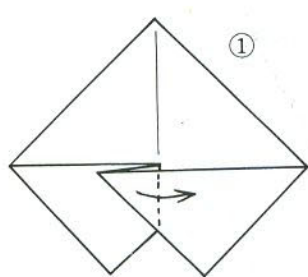
除了上面照片之外，也可以有這種組合方法。



菱形組合・橄欖球組合

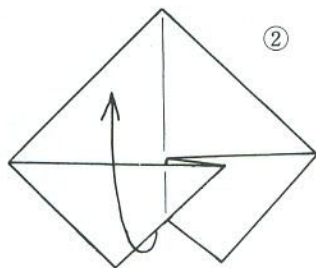
將插入紙袋的翼與紙袋左右位置對調，也就是「逆折」，這種紙型可以組合出橄欖球狀的造型。不過，它的拼法比較脆弱，是必須克服的一點。

★ 逆折

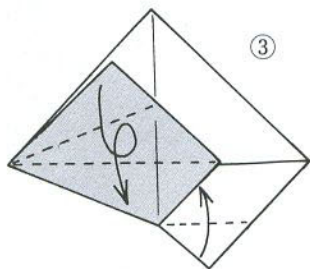


①

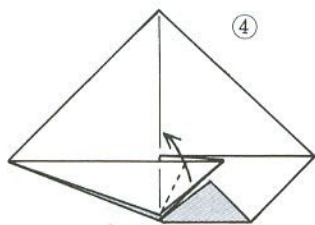
從 37 頁的⑥開始



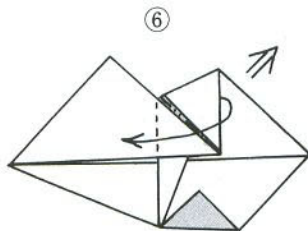
②



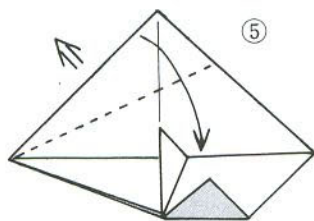
③



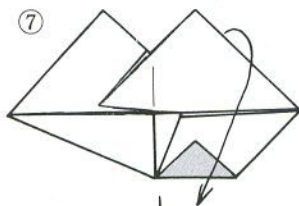
④



⑤

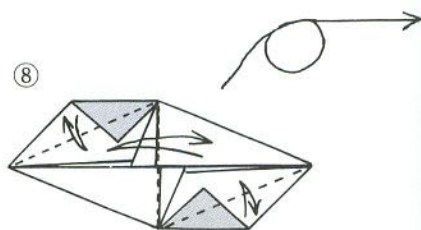


⑥

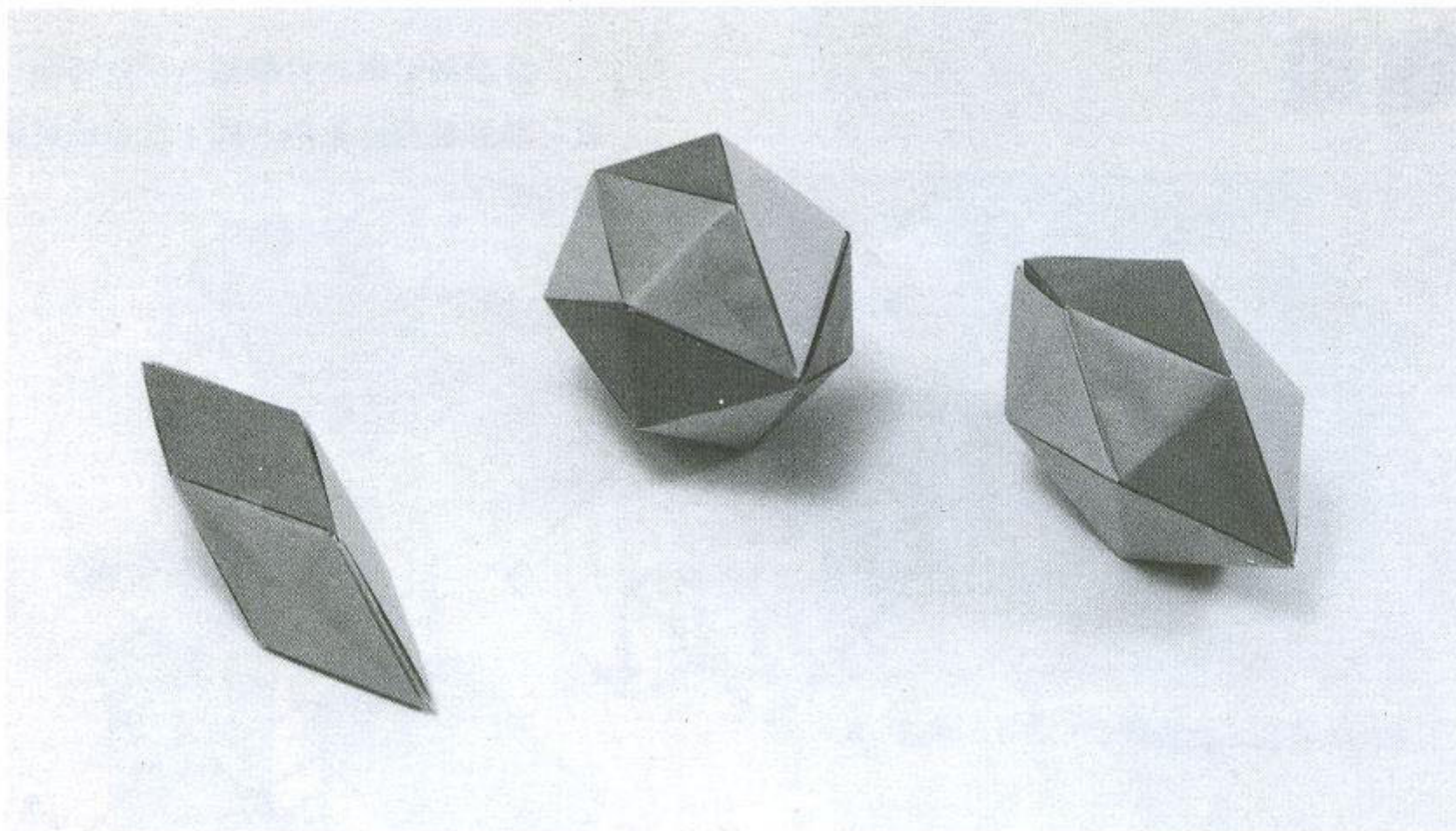


⑦

以下折法同①~④

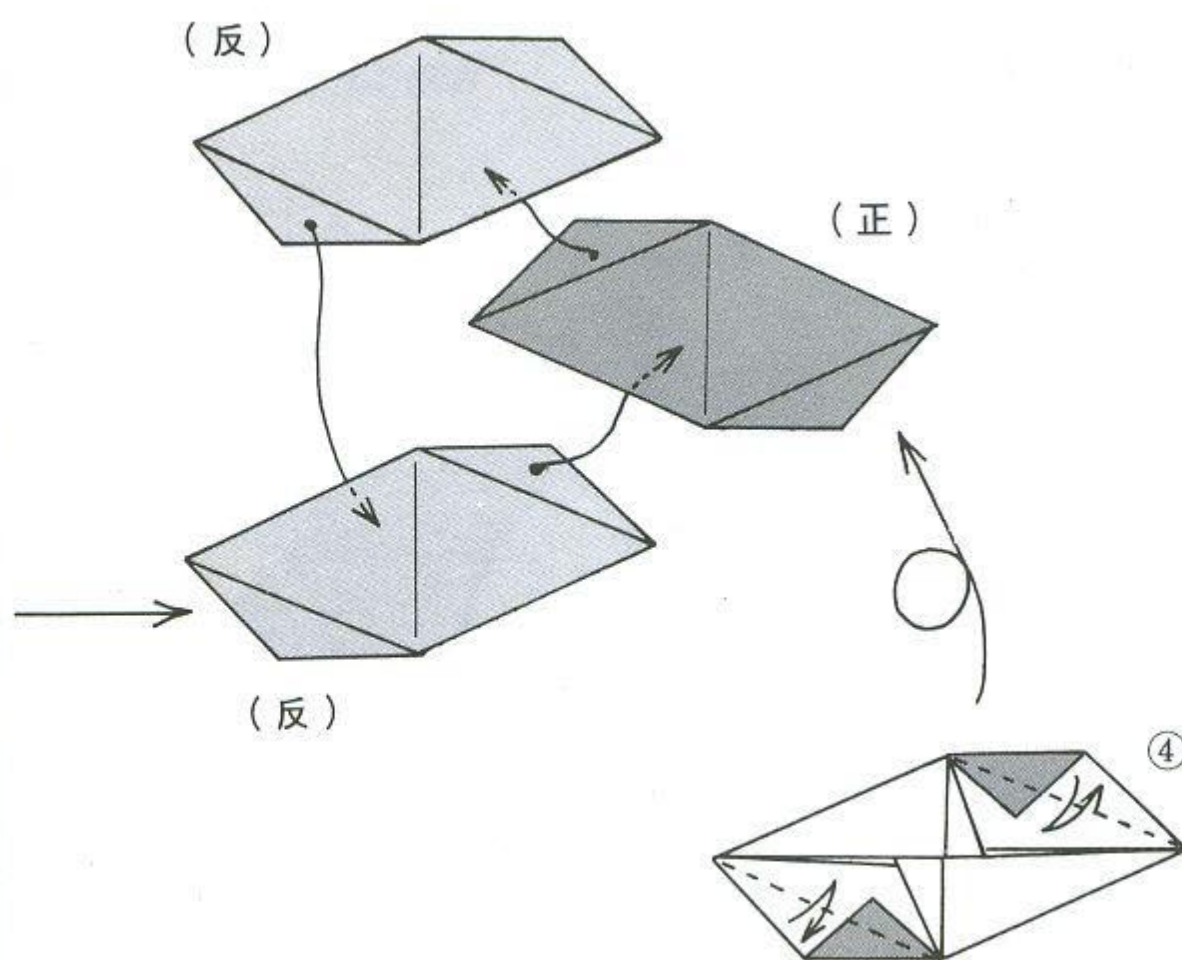


⑧

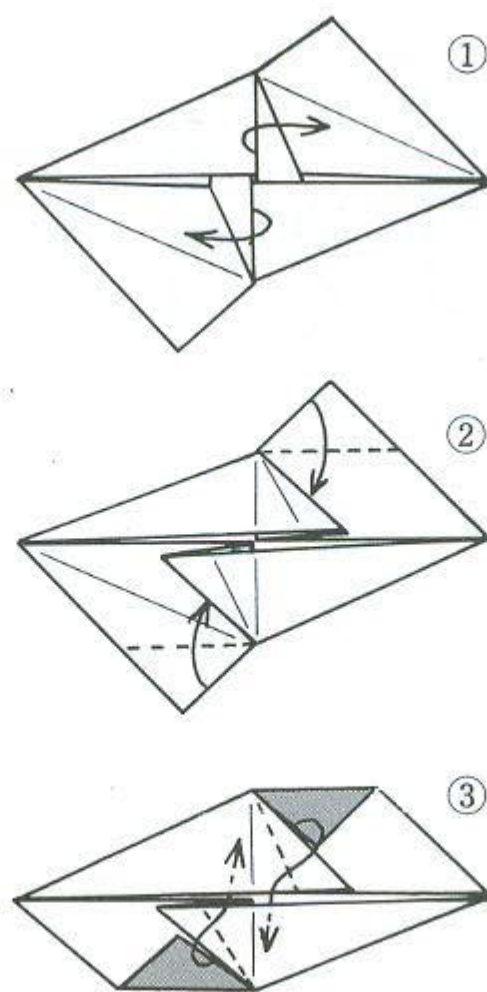


▲ 左起：6 張、12 張、10 張組合

〈組合方法〉

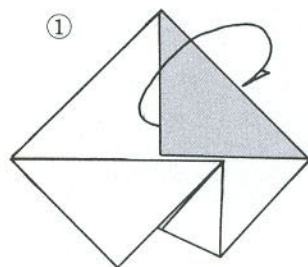


從 38 頁的步驟(16)開始

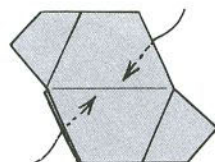
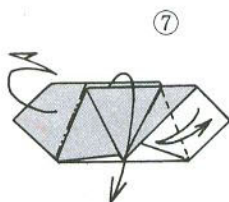
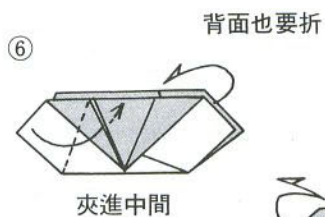
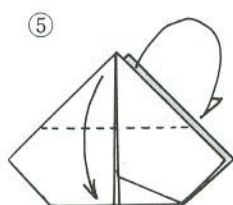
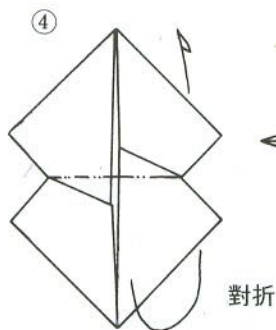
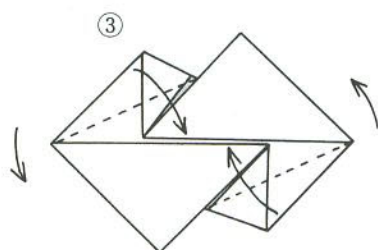
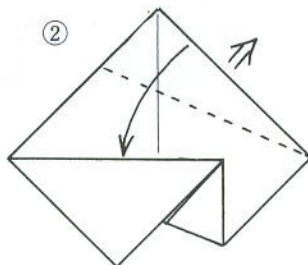


龜殼

這個造形取材自龜殼，只要將前一頁「菱形組合」的角去掉，就會成為這個造型了。

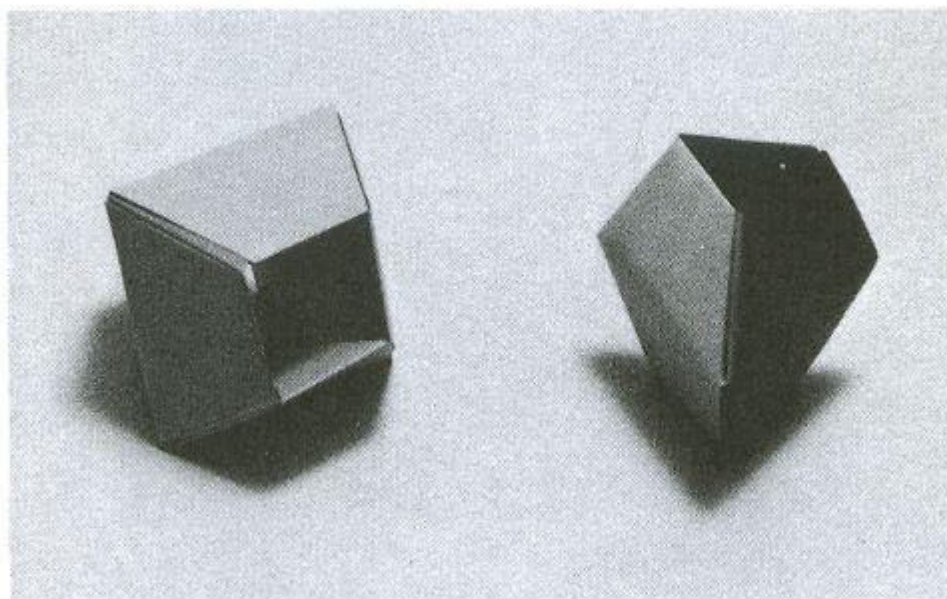
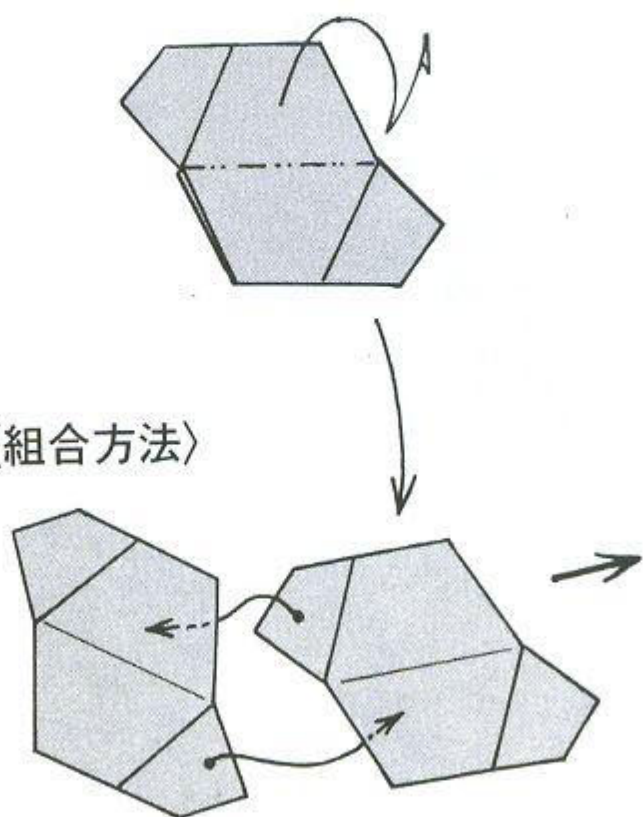


從 37 頁的④開始



向外折出折痕

〈組合方法〉

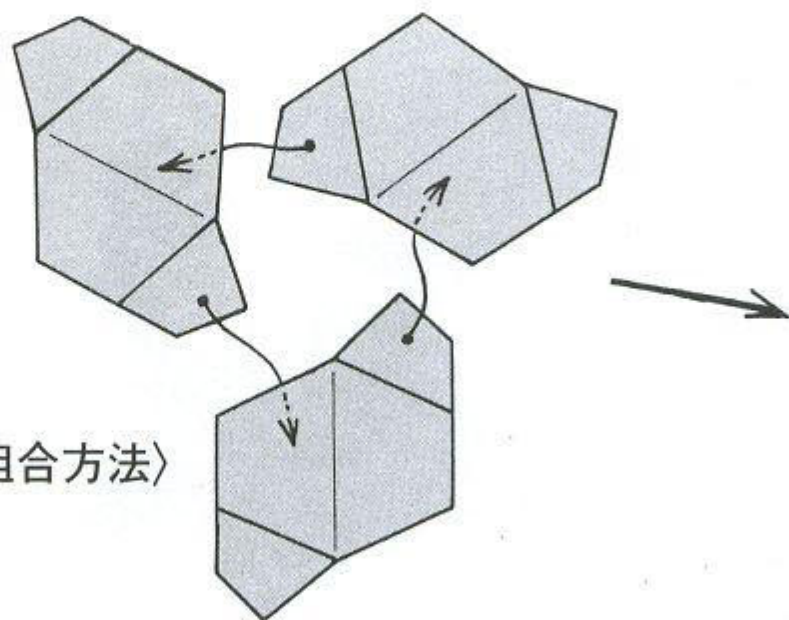


▲ 左起：4張、3張組合

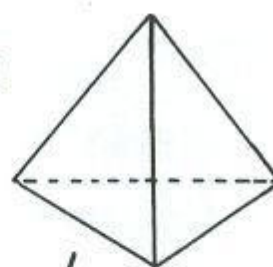
如同「菱形組合」一樣，您也可將龜殼弄凸或弄凹地組合起來。

下一頁的許多造型，是根據下圖將它弄凹的方法組合出來的。

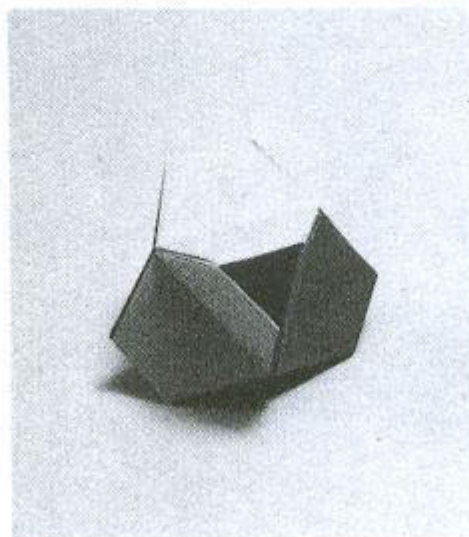
〈組合方法〉



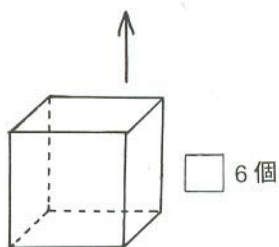
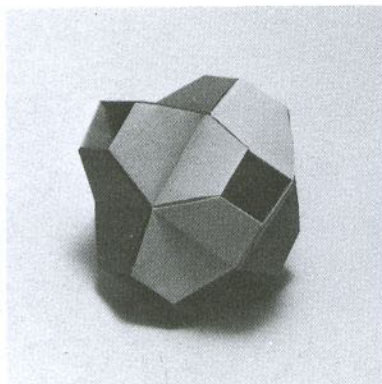
△ 4個



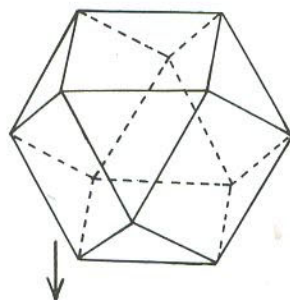
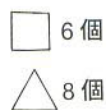
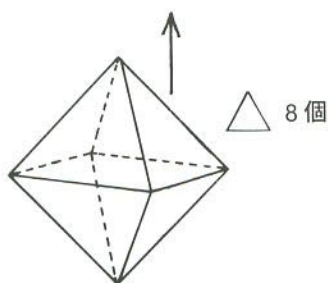
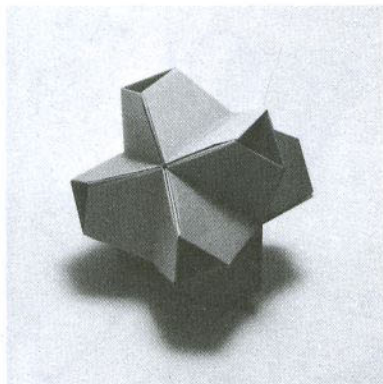
▼ 6張組合



▼ 12 張組合



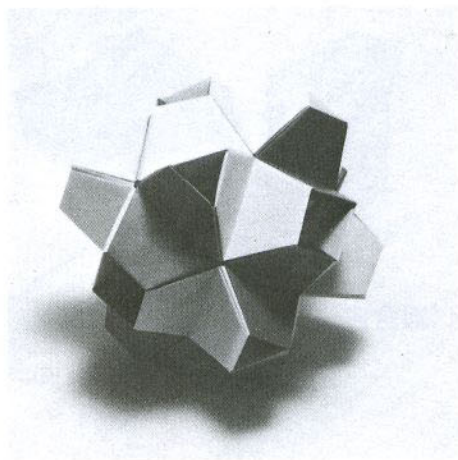
▼ 12 張組合



上面二個造型，同樣是由 12 張所拼出，但形狀卻不同，這一點是組合式折紙最有趣的地方。

凹洞部份，您可以將它做成三角形或四角形。這裡雖沒有五角形的組法，您可以參照 53 頁的立體架構，用心地做出來。

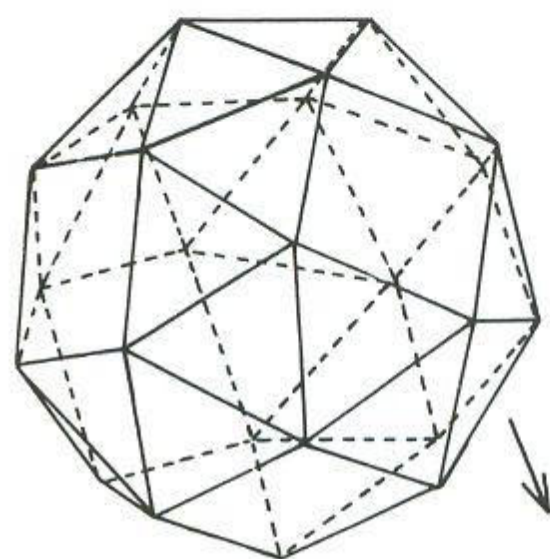
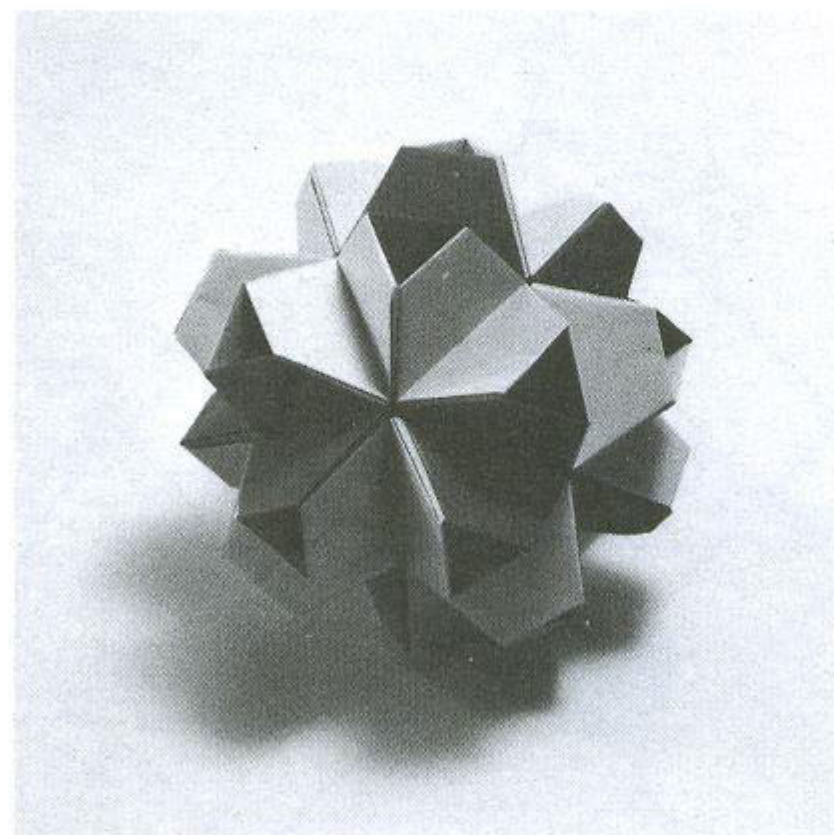
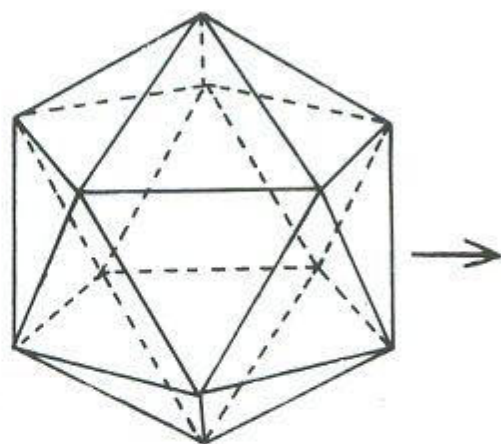
不過，體積若太大，紙的重量可能會破壞組合好的立體，這時候您就必須使用漿糊了。



24 張組合 ►

▼ 30 張組合

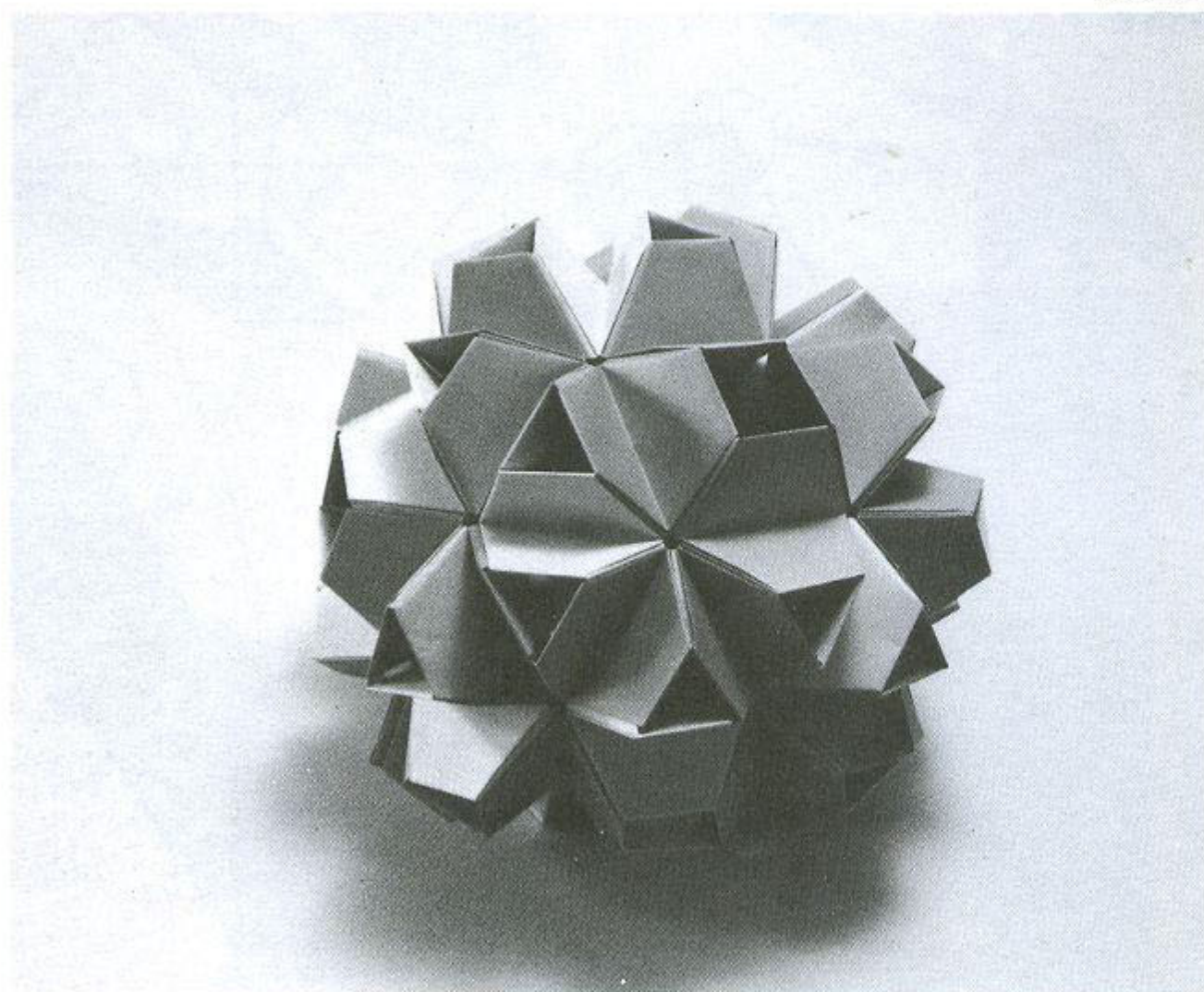
△ 20 個



▼ 60 張組合

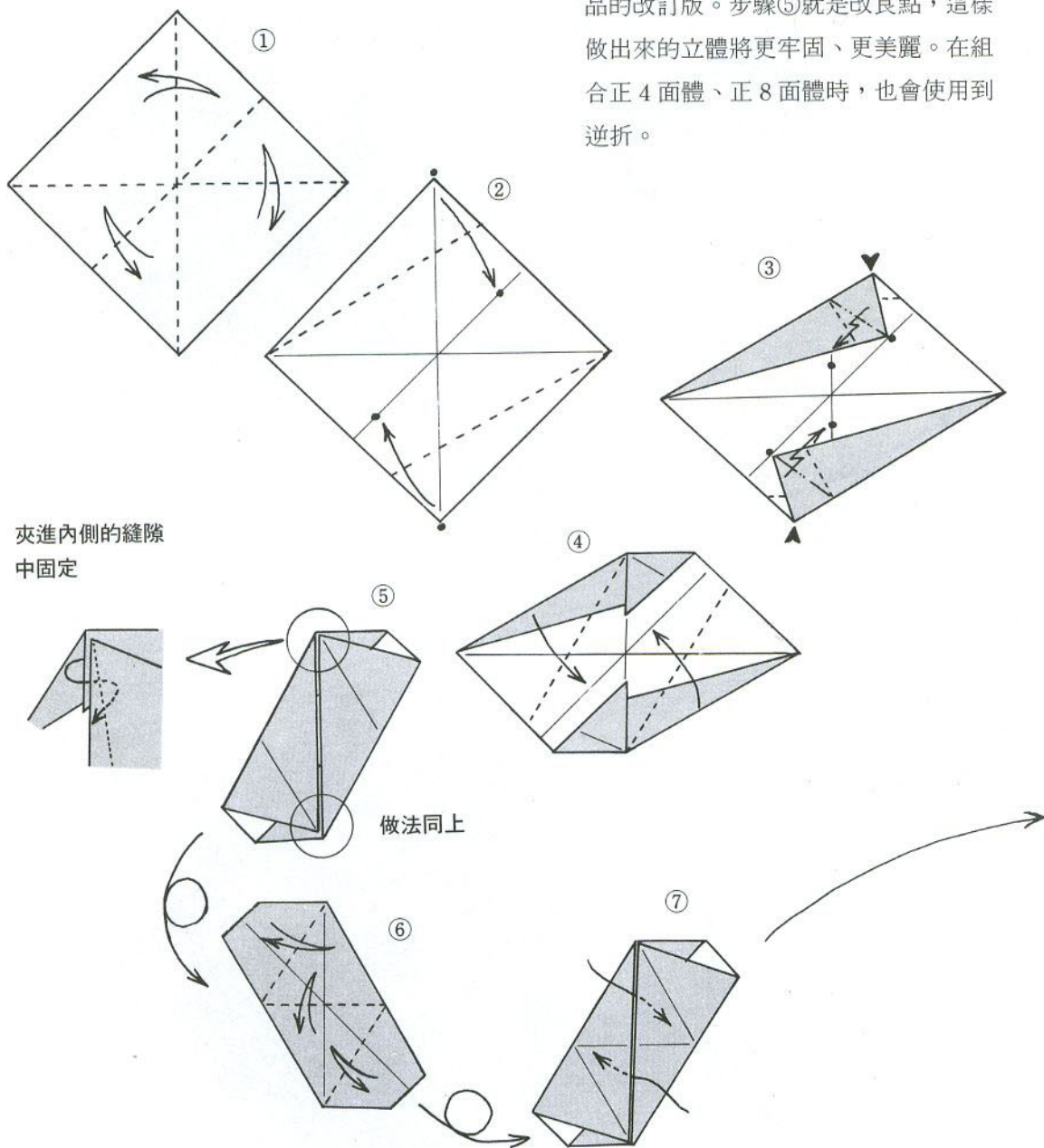
□ 6 個

△ 32 個

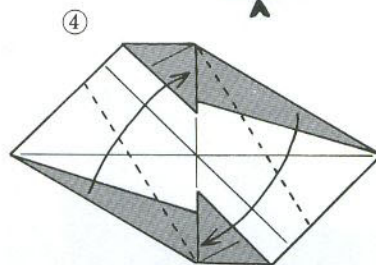
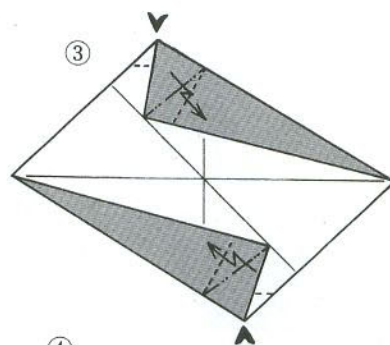
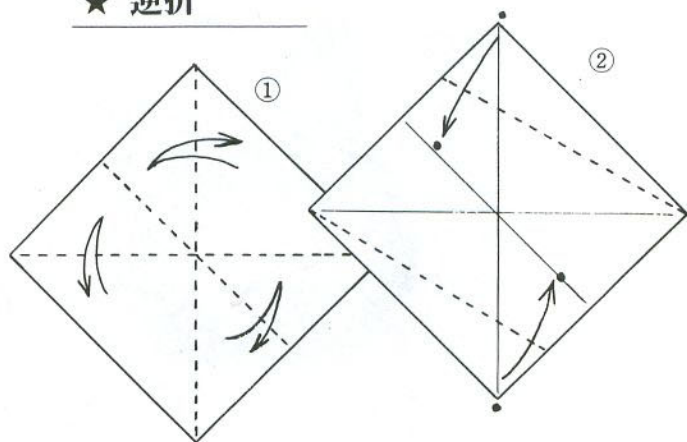


正三角形組合・正 4、8、20、面體

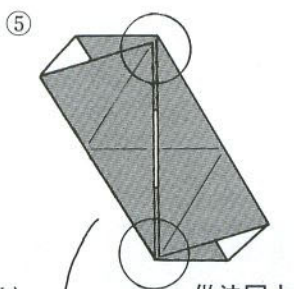
這個折法，可以說是以前發表過作品的改訂版。步驟⑤就是改良點，這樣做出來的立體將更牢固、更美麗。在組合正 4 面體、正 8 面體時，也會使用到逆折。



★ 逆折

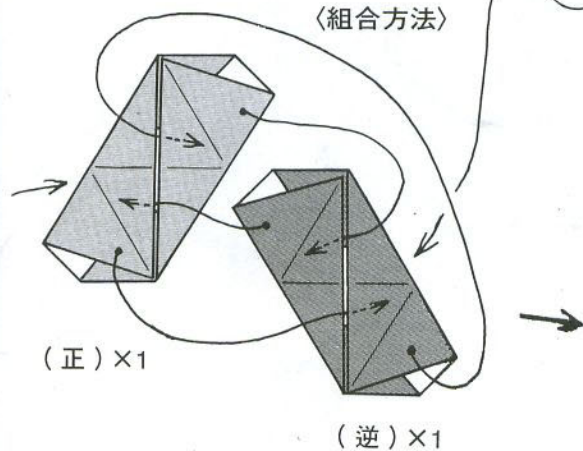


○ 處做法同左頁
⑤ 夾進縫隙中固
定

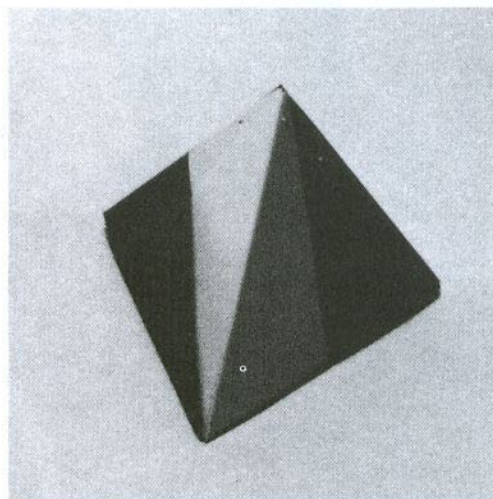


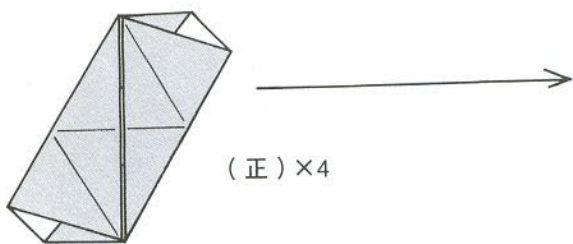
做法同上

〈組合方法〉

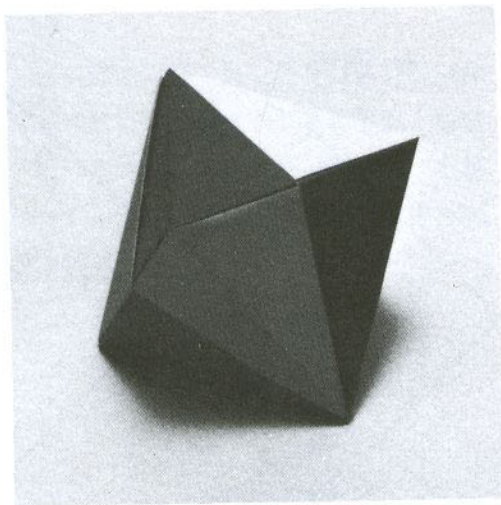
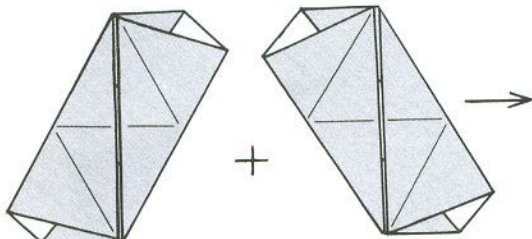


正 4 面體 ►

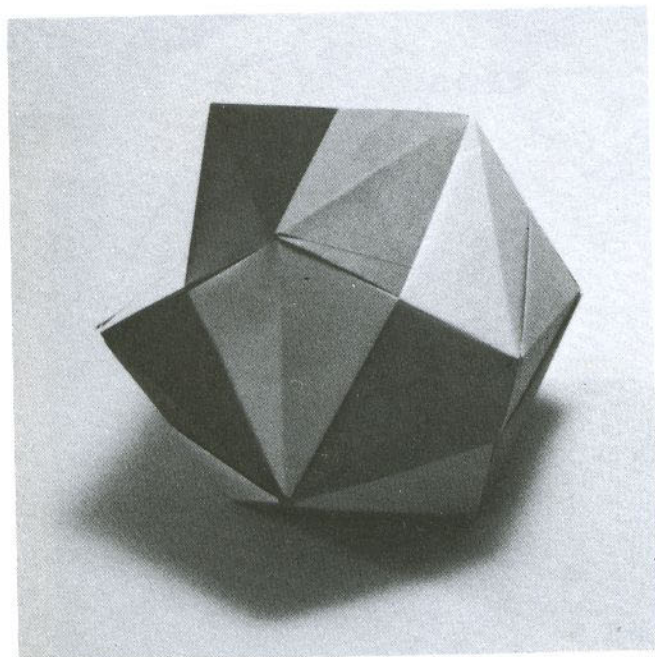




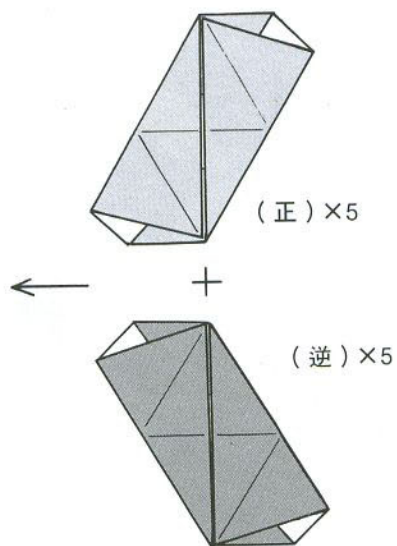
或



▲ 正8面體



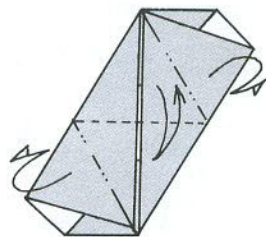
◀ 正20面體



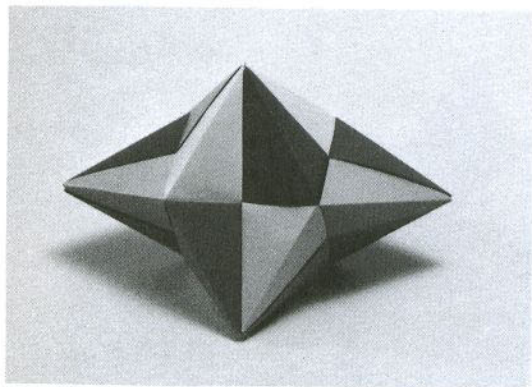
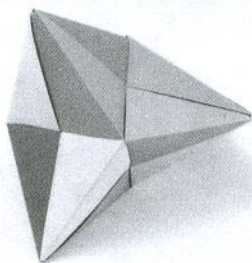
正三角形組合・星形組合

這次要做的是像糖球一般，有尖角突出的「星形組合」。如右圖折出折痕，用同一種紙型組合。

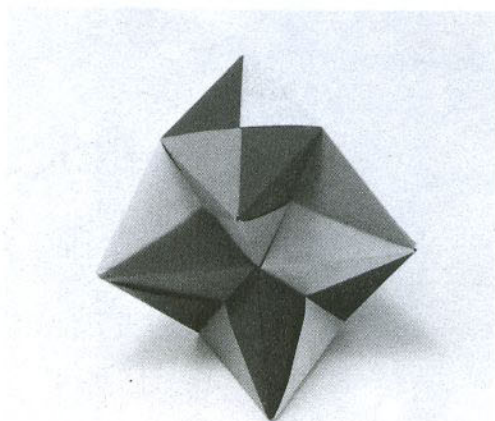
這一頁全是奇數的組合，下一頁開始的偶數組合可能比較容易了解，所以您最好從下一頁的幾個造型開始著手去做。



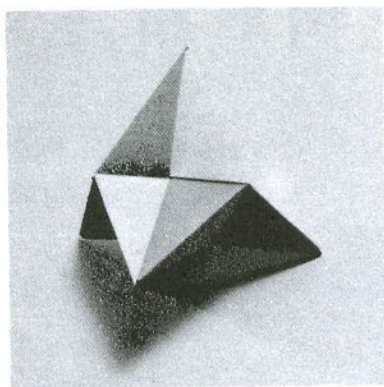
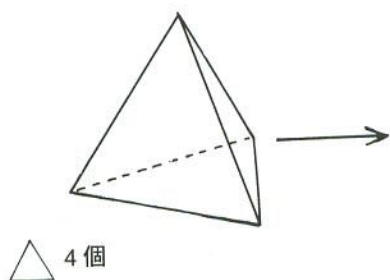
▼ 7 張組合



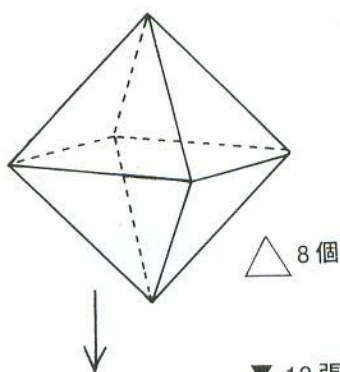
▲ 9 張組合



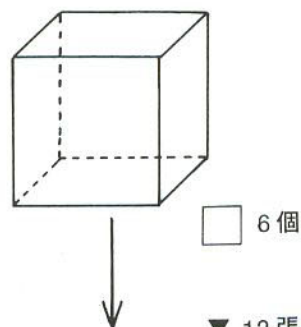
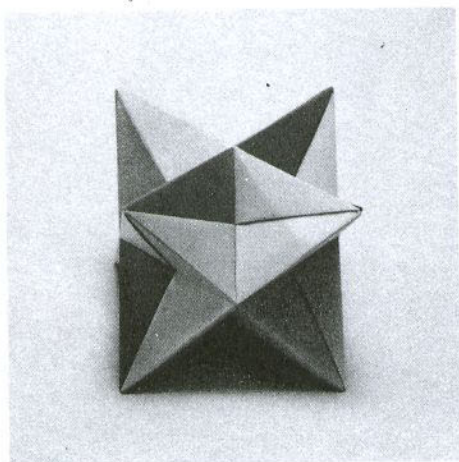
▲ 11 張組合



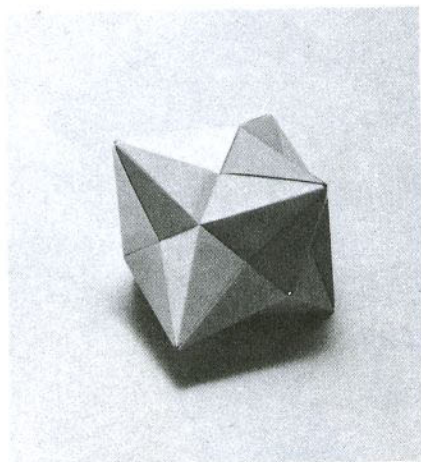
▲ 6 張組合

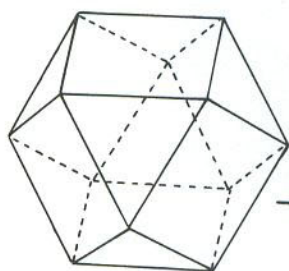


▼ 12 張組合



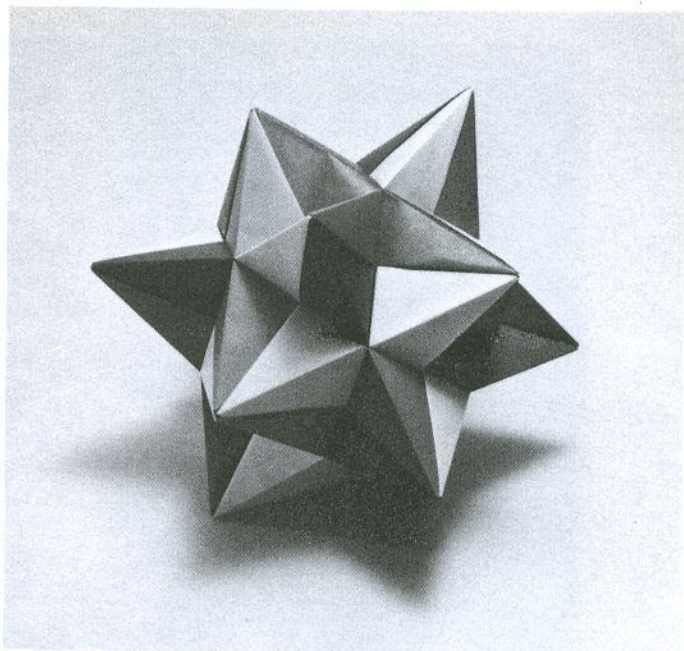
▼ 12 張組合



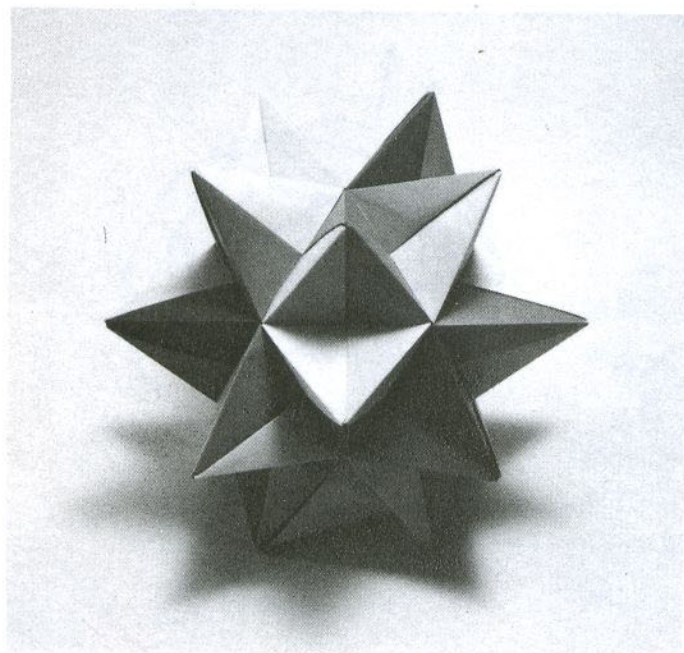


□ 6 個

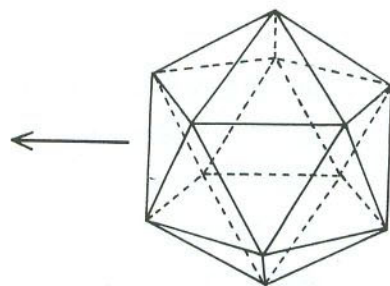
△ 8 個



24 張組合 ▶

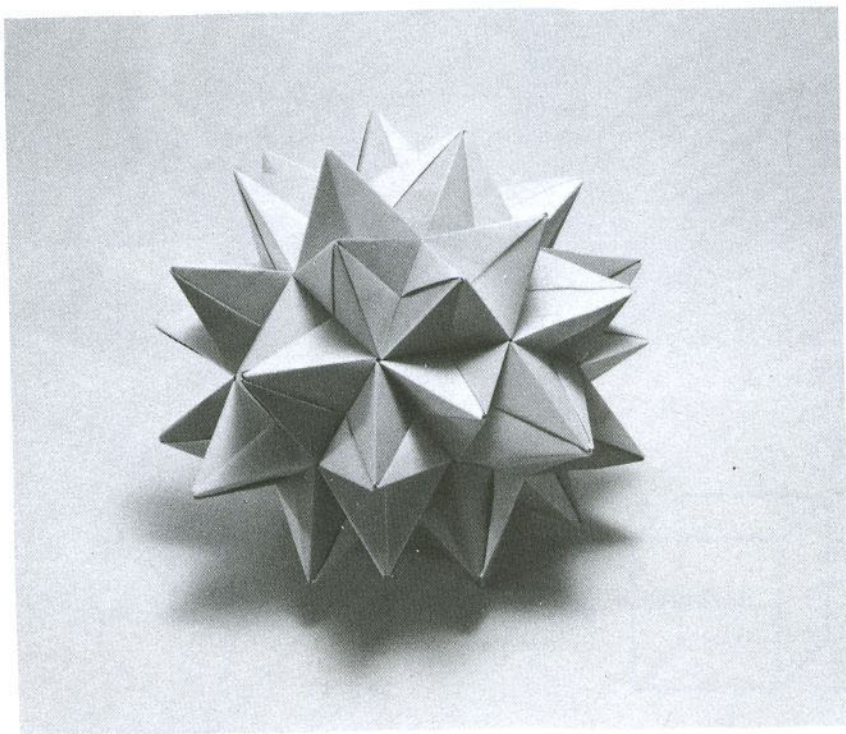


◀ 30 張組合



△ 20 個

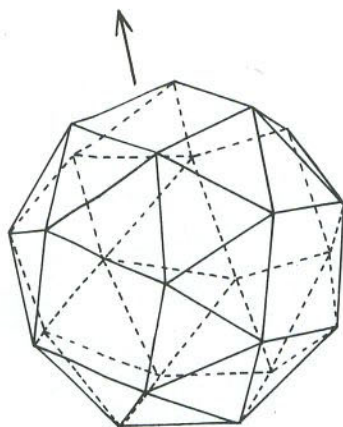


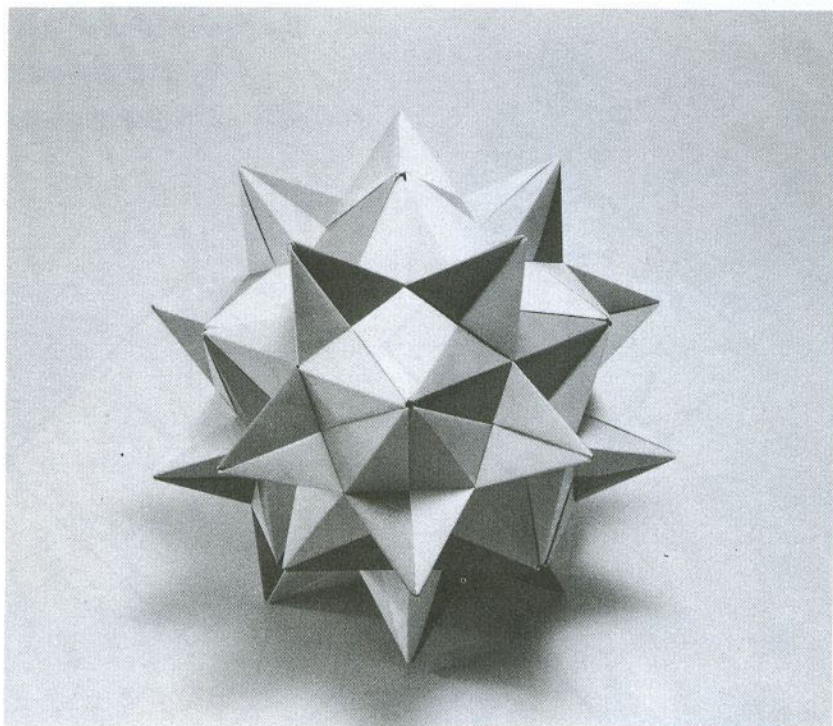


▲ 60 張組合

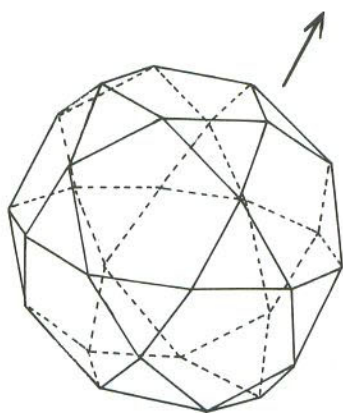
□ 6 個


△ 32 個





▲ 60 張組合



 12 個

 20 個

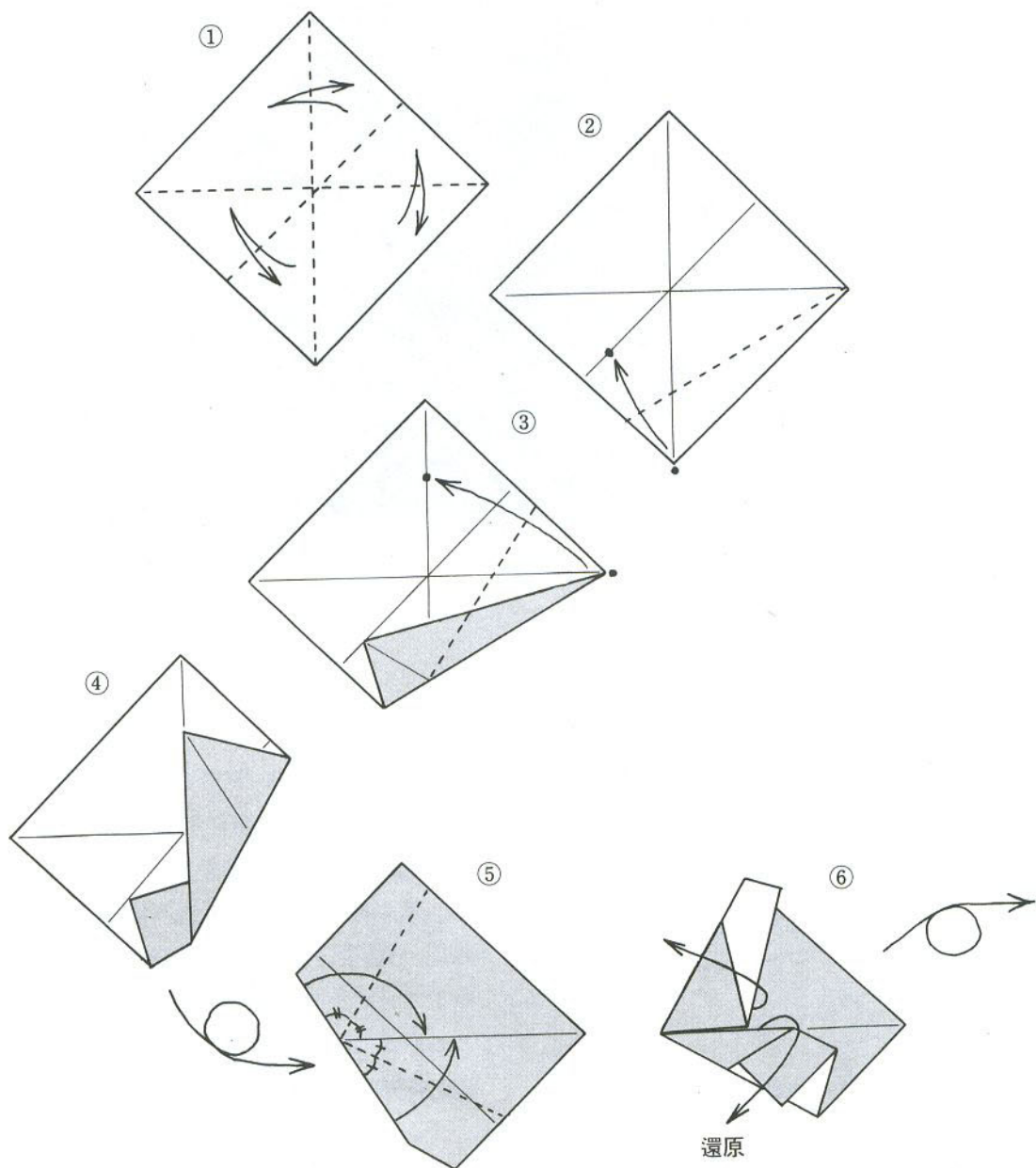
這二頁都是 60 張組合的造型。用 60 張組合，成果非常壯觀，當您完成時，一定會不由自主的發出讚嘆之聲。

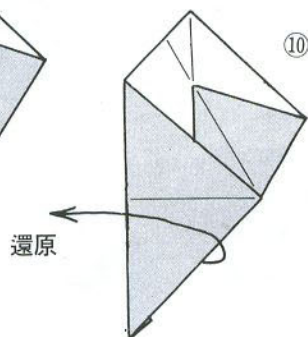
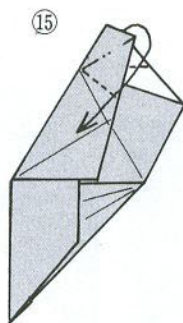
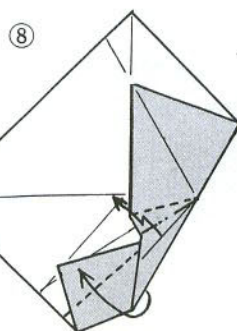
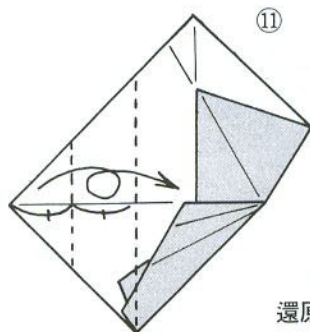
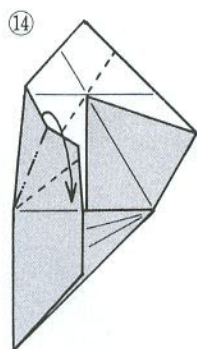
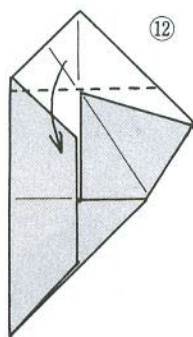
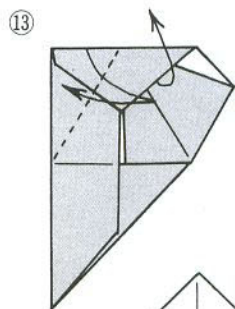
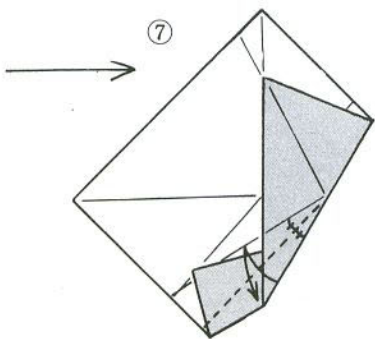
這二種雖都是由 60 張所拼成，但是這一頁的五角形拼法，比起來就脆弱多了，一不小心，馬上就會解體。因此，如果要吊起來當裝飾品，一定要用漿糊把它黏牢。

長崎風箏

這是將前面的正三角形的一邊，改為直角等邊三角形的造型。

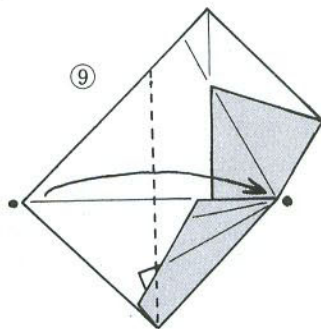
它是由二個不同形狀的三角形所組成的，因外形像長崎風箏而命名。

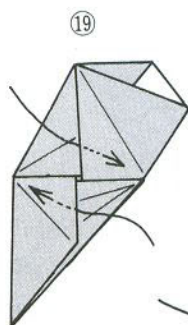
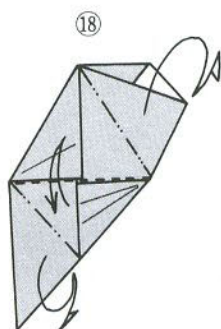
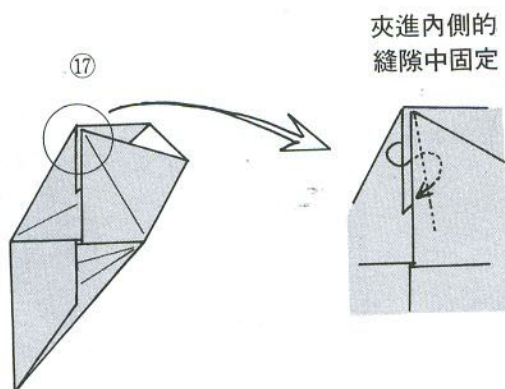
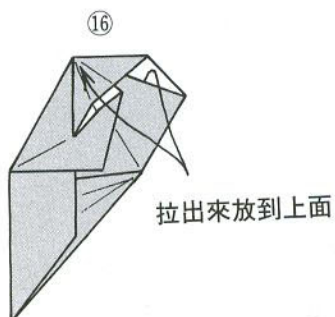




還原

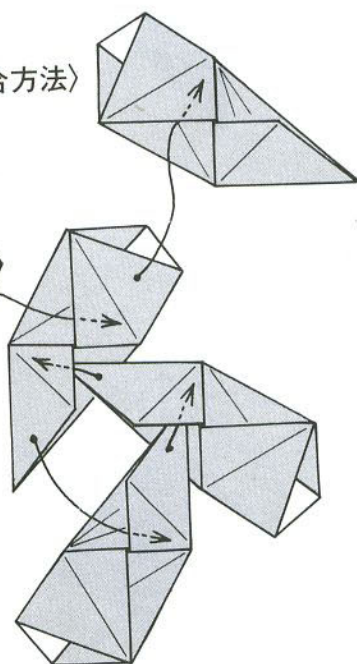
接下一頁 ➡

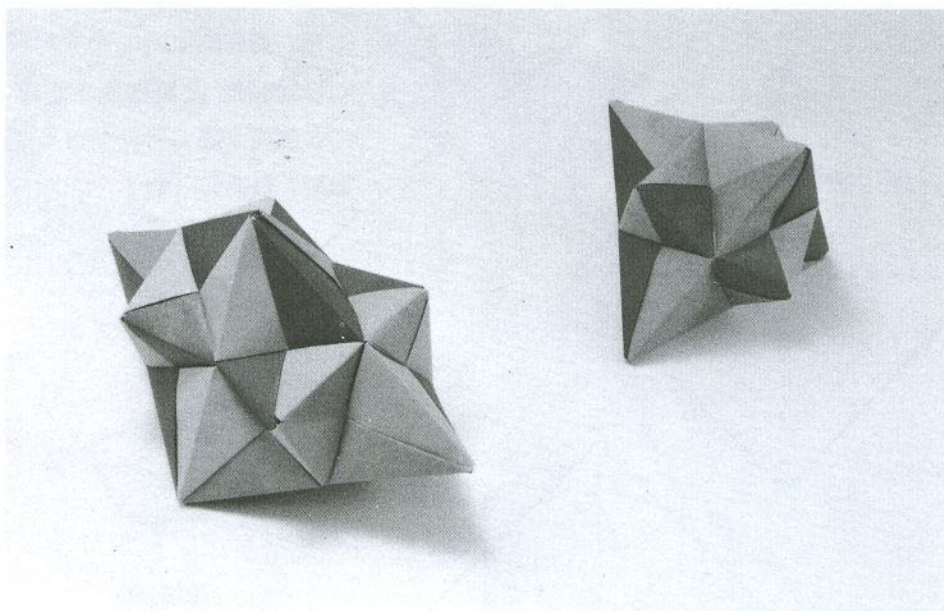




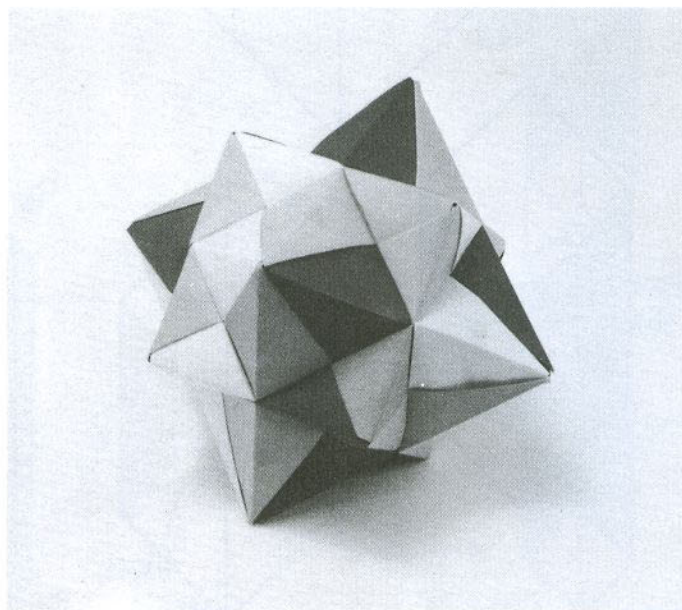
〈組合方法〉

用三張直角等邊三角形做
出一個金字塔，再用 3~5
張正三角形組合起來。





▲ 左：18 張組合，右：12 張組合

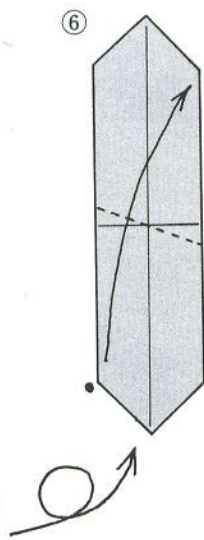
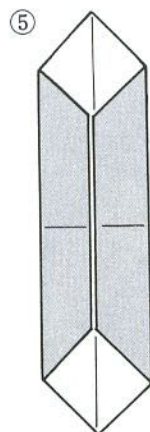
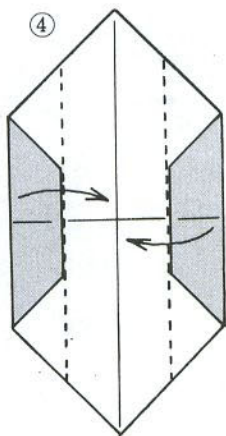
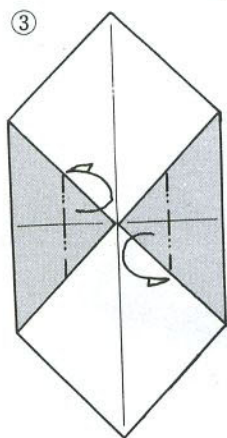
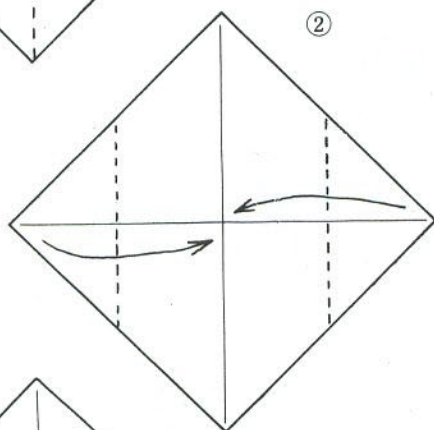
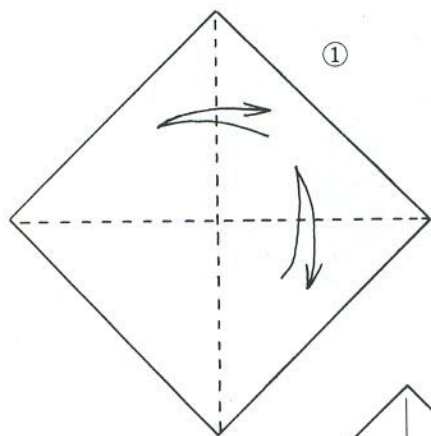


▲ 24 張組合

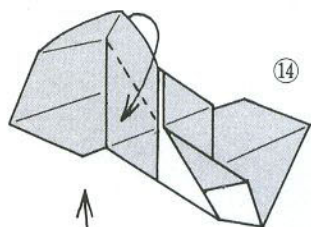
香包 12 面體

這也是應用以前發表過的作品，再加上一點技巧，使完成的作品更加牢固而苦心構思出來的。

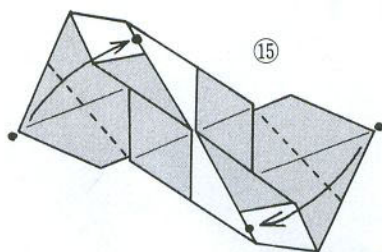
說它是 12 面體並不正確，但是它在各個面上都有星形突出，可說是相當棒的「紙香包」哦！



像要蓋住似地
翻下來

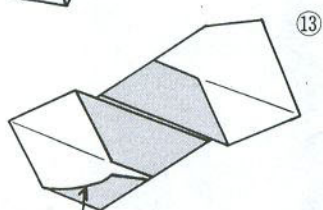


⑭



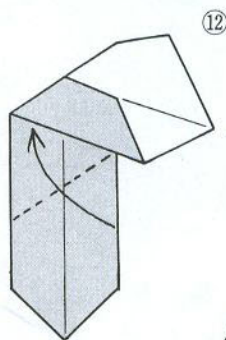
⑮

接下一頁 ➡

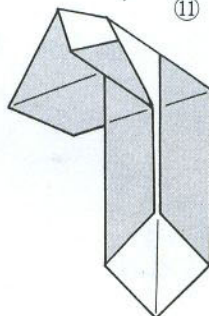


⑬

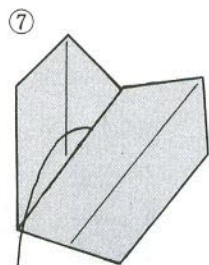
將這裡
拉直立起來



⑫

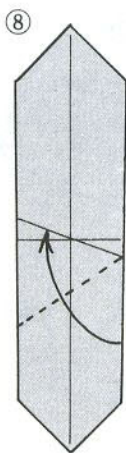


⑪

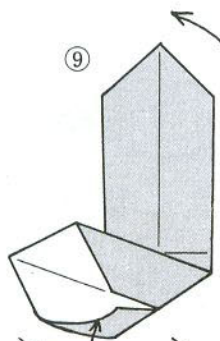


⑦

還原



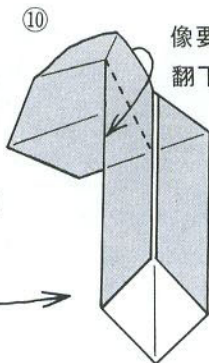
⑧



⑨

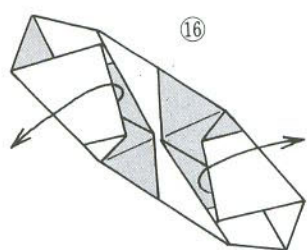
將這裡
拉直立起來

上下顛倒

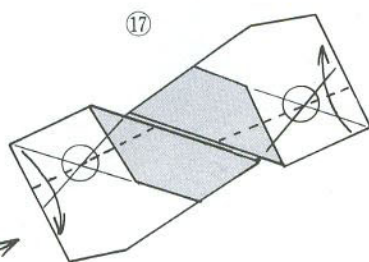


⑩

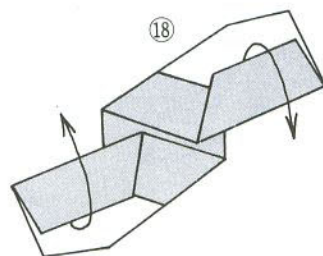
像要蓋住似地
翻下來



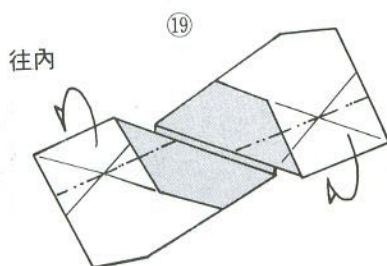
16



17

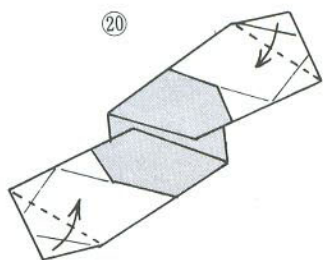


18

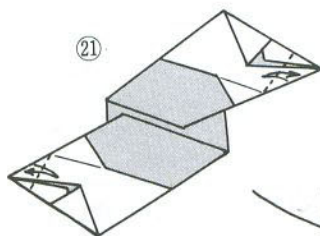


19

照(18)所折的折痕，
往內折

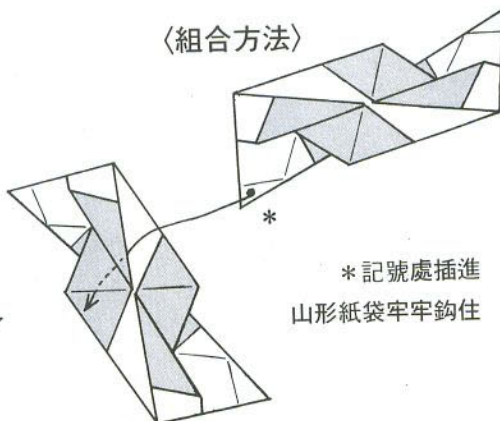


20

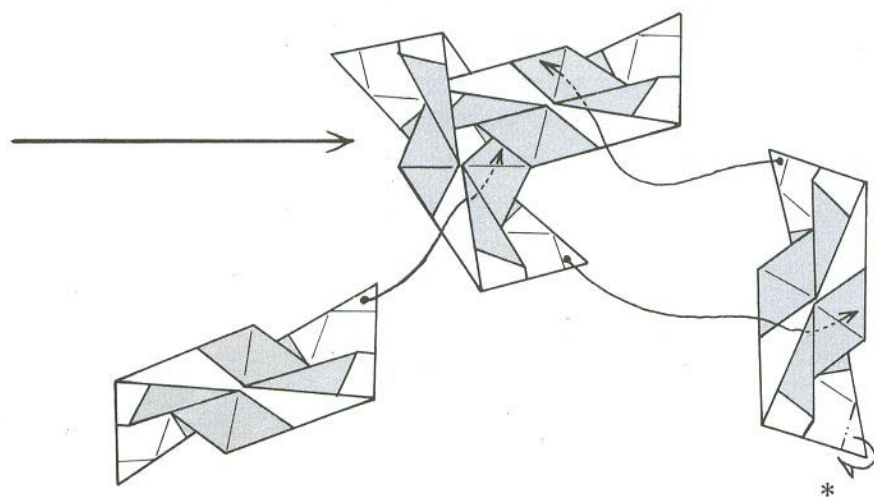
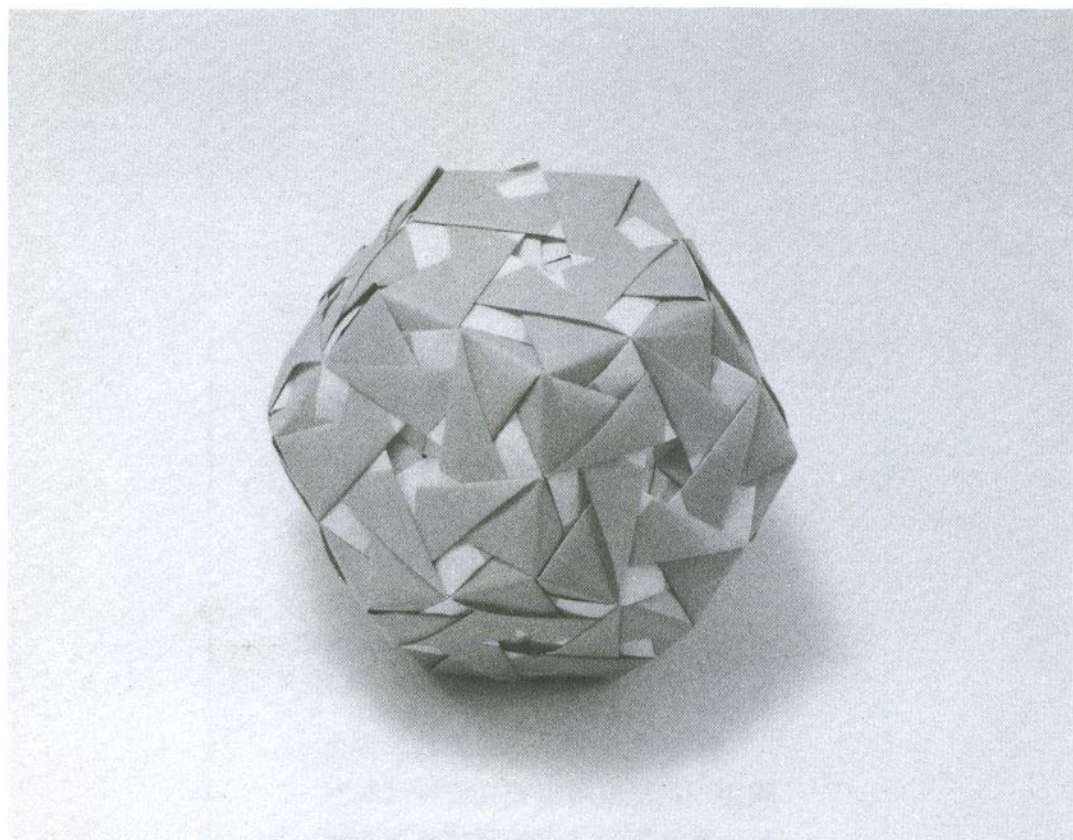


21

〈組合方法〉

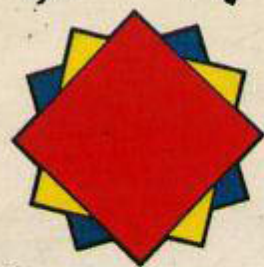


* 記號處插進
山形紙袋牢牢鈎住



最後一張如果不易組合，
可將*記號部分往內
折，然後插入。

折紙世界！



立體造型折紙 組合式折紙

